Adult Student Satisfaction in an Accelerated LPN-RN Nursing Program

Kathy French Batton
University of Southern Mississippi

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ADULT STUDENT SATISFACTION IN AN
ACCELERATED LPN-RN NURSING PROGRAM

by

Kathy French Batton

A Dissertation
Submitted to the Graduate Studies Office
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

Approved:

August 2009
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Abstract of a Dissertation
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ABSTRACT

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This study was designed to examine the importance and degree of satisfaction placed by adult, nontraditional, accelerated LPN-RN students on student service item scales as measured by the results of the Noel-Levitz® Adult Student Priorities Survey™. In addition, the study examined the correlation between satisfaction with each of the scales and student success as measured by current nursing course grade point average (GPA). The student service scales of importance were: academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence. The conceptual framework for the study was derived from Herzberg’s (1966) satisfaction theory.

The sample was one of convenience and consisted of 54 nontraditional, accelerated LPN-RN students. Data analysis indicated that LPN-RN students identified instructional effectiveness as being most important followed by campus climate and registration effectiveness. The academic services scale was identified as least important however; it was still rated as highly important to the students. Students were most satisfied with the instructional effectiveness scale followed by safety and security and campus climate. Overall, students rated satisfaction with all scales as high. Data revealed
no statistically significant relationship between accelerated LPN-RN student satisfaction on any of the identified scales and GPA.

Items identified as being most important and delivering the most satisfaction by the students typically dealt with interpersonal and academic relationships between faculty and students, course expectations, and perceptions of students related to being respected, treated fairly and being “cared for.” For students, these factors are intrinsic to the “job” of being a student thus; Herzberg’s (1966) theory constructs related to the presence of intrinsic factors or motivators as being necessary for job satisfaction to occur are generally upheld.

Services related to factors outside of the classroom and extraneous or extrinsic to the “job” of being a student were found to be least important to and to provide the least satisfaction for the accelerated LPN-RN students. These findings also lend support to Herzberg’s (1966) theory.
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CHAPTER I
INTRODUCTION

In institutions of higher learning across the country the phrase “Do more, with less—and do it better” is being repeated. Over the last several years, colleges and universities have been faced with dwindling federal and state funding as well as declining enrollment. As a result, educational institutions are being pressed to increase student enrollment and retention as well as maintain or improve academic quality. This is especially challenging given that colleges and universities must adapt to the current educational climate while at the same time adhere to the mission and goals of the institution. To meet goals of increasing enrollment, educational institutions are targeting more diverse and nontraditional student populations. The nontraditional adult student returning to higher education to obtain additional undergraduate degrees or to increase professional skills is among the targeted groups.

As resources have declined, competitiveness among colleges and universities for students and funding has increased. In addition, due to changes in accreditation, some programs of study such as nursing have had an even greater focus placed on student retention. For these programs the need to recruit students who have a reasonable chance of being successful and ultimately completing the program of study has escalated.

To respond to the changing educational environment, colleges and universities are altering the way they view students and the way they manage their institutions. Management and marketing concepts previously used only in business and industry are being introduced and implemented in an attempt to “keep up with the times.” Institutions
that don’t respond to the changing educational environment are at risk of additional reductions in funding, losing programs of study, or even closing.

These administrative and ideological changes have resulted in higher education becoming a service driven by customer needs (Cheng & Tam, 1997). This is a result of the decreased funding which in turn has forced students and their families to have a greater financial investment in their educational pursuits. In addition, there is an increased emphasis on college and university institutional effectiveness especially as it relates to improving students’ overall educational experience (Long, Tricker, Rangecroft, & Gilroy, 1999).

In The Condition of Education 2006 Report (U.S. Department of Education, 2006) the National Center for Educational Statistics (NCES) predicted a continued slow increase in the number of participants in undergraduate education through 2015. In addition, the NCES postulates that due to the aging population and need for more skilled workers, the number of students participating in adult education will continue to increase and that this group of learners will continue to become more diverse (U.S. Department of Education, 2003).

The NCES Special Analysis 2002 Report estimated that more than 73 % of students enrolled in higher education have at least one characteristic of an adult learner (US Department of Education, 2002). According to the NCES (2002), these students are frequently part-time, financially independent, employed full time, or are responsible for others. With this number of adult learners, educational institutions must address the needs of this diverse student population and implement programs and practices that will promote their participation, success, and satisfaction.
Schools of nursing are dealing with the issues of funding and enrollment as well as a nursing shortage that is being called a “critical national priority” (Medscape Wire, 2002, ¶6). It is imperative that this shortage be addressed because there is a predicted need for more than one million additional nurses by 2012 (American Association of Colleges of Nursing, 2005). To meet public needs for registered nurses, schools of nursing have been implored to rapidly increase the number of students admitted and ultimately eligible to take the National Council of State Boards’ examination to become registered nurses (Symes, Tart, & Travis, 2005). In response to these pressures, schools of nursing have recognized that practicing licensed practical nurses (LPNs) are a large prospective student population which could be utilized to meet these demands. These adult, practicing LPN’s have not previously been heavily marketed as a potential pool of registered nurse students. In response to the need for additional registered nurse students, many schools of nursing have in place or are currently developing licensed practical nurse to registered nurse (LPN-RN) accelerated, or bridge programs that are specially designed for the working, nontraditional student.

LPN-RN students are considered adult, “nontraditional” students since they have already completed a career or certificate program and are returning to school to further advance their career. They typically have jobs and continue to be self-supporting. The LPN-RN students are frequently responsible for families and are older than the more traditional student who has gone directly from high school to college. These students are diverse and have unique educational needs. Hadfield (2003) suggests that colleges and universities tend to focus on the traditional student and that they must develop a greater understanding of adult learners if they are to recruit and retain this student population.
College and university student satisfaction is becoming more recognized as an important variable in student retention (Elliot & Shin, 2002; Konrad, 2002; Koseke & Koseke, 1991). Other research suggests that student satisfaction has a direct relationship to student motivation and individual, academic, and professional goal attainment (Elliott & Shin, 2002; Konrad, 2002; Pike, 1993). As awareness of the importance of student satisfaction increases, so does the need to study populations which are more diverse than the traditional college student population.

Business and industry have long recognized the importance of employee and customer satisfaction and its impact on the success of an organization. Since higher education is increasingly market driven and thus forced to be more competitive, it is now utilizing many of these same principles with its marketing and management techniques.

Students are constantly responding to the conditions in which they are surrounded while endeavoring to acquire an education in much the same manner that employees are responding to their jobs and consumers are responding to conditions surrounding their commercial and business pursuits (Tuten & August, 1998). Students are being seen and treated as consumers of education instead of just passive recipients of knowledge. Like other business entities, higher education is realizing that satisfaction levels of its consumers—the students, and the level of quality perceived by students—will impact student retention and ultimately student success (Astin, 1993).

Paramount to understanding adult learners’ satisfaction and what they believe to be important in relation to their educational pursuits is to first gain an understanding of satisfaction theory and the impact of satisfaction on success. In addition, it is important to be aware of nontraditional student needs as it has been suggested that when consumers
evaluate service they usually compare that service to what they originally expected. These expectations provide a baseline from which to establish the consumers' satisfaction (Wright & O'Neill, 2002). Given the paucity of information specifically relating to the impact of satisfaction on student grades, the influence of satisfaction on student attrition and grades should be reviewed.

Literature is replete with research related to traditional college and university students; however, there is a dearth of information related to the nontraditional LPN-RN student. An extensive literature search revealed no research specifically related to LPN-RN accelerated student satisfaction or the impact of satisfaction on these students’ academic success. Obviously, with the LPN-RN student being such an understudied population, much research is needed relative to this enlarging group so that educators and academic institutions can best meet student needs.

Statement of the Problem

The purpose of this study was to examine adult, nontraditional, accelerated LPN-RN student satisfaction as measured by the results of the Noel-Levitz™ Adult Student Priorities Survey (Noel-Levitz™ Adult Student Priorities Survey; Appendix A). In addition, the study examined the correlation between satisfaction and student success as measured by grade point average (GPA). The study focused on specific items of importance to the students, such as: academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence. Each of the items was examined according to the importance it was to the student, how satisfied the student was with each item and how satisfaction with each item impacted student success.
Purpose of the Study

As the need for registered nurses increases, schools of nursing are attempting to meet the health care needs of the public by increasing enrollment and ultimately the number of successful registered nurse graduates eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN™). In doing this, schools are looking to practicing LPNs as a student population that is readily available and that could complete the course requirements of a registered nurse program in an accelerated period of time. These LPN nontraditional students tend to be more diverse than the traditional student population and in order to meet these students’ needs educational institutions must determine what those needs might be, how well those needs are being met, and how meeting those needs might impact student success.

Given the dearth of information available on accelerated LPN-RN students, additional knowledge pertaining to these students was greatly needed. Assessment of student satisfaction is an assessment measure that can be utilized to identify the needs and expectations of these understudied students. Educational institutions could use the information to improve services that might ultimately facilitate the success of these nontraditional students.

Research Questions

As a result of the nursing shortage and the predicted worsening of this shortage, colleges and universities are actively pursuing accelerated LPN-RN students. Given that a dearth of research exists on these students especially concerning satisfaction with their college experience and how that satisfaction impacts their success, the following research questions were formulated:
1. What are the items of importance in terms of academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence for students enrolled in an accelerated LPN-RN program?

2. What are the levels of satisfaction in terms of academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence for students enrolled in an accelerated LPN-RN program?

Hypothesis

For the purposes of this study the following hypothesis was tested:

H1: There is a statistically significant relationship between LPN-RN accelerated student GPA and satisfaction as measured by the subtests of academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence.

Definitions

*Academic Advising Effectiveness*: Scale on the ASPS which “assesses the comprehensiveness of the academic advising program, evaluating advisors’ knowledge, competence, approachability, and personal concern for students” (Noel-Levitz, 2007, p. 12).

*Academic Services*: Scale on the ASPS which “assesses services students utilize to achieve their academic goals. These services include the library, computer labs, tutoring, and study areas” (Noel-Levitz, 2007, p. 12).
Admissions and Financial Aid Effectiveness: Scale on the ASPS which “measures the extent to which counselors are competent and knowledgeable, along with students’ perceptions of the effectiveness and availability of financial aide programs” (Noel-Levitz, 2007, p. 12).

Adult Student Priorities Survey (ASPS): A survey instrument designed to survey the college experiences of adult college students. The instrument is a two-dimensional survey which measures ratings of importance and levels of satisfaction associated with the college experience.

Campus Climate: Scale on the ASPS which measures “the extent to which the institution provides experiences that promote a sense of campus pride and belonging” (Noel-Levitz, 2007, p. 12).

Grade Point Average (GPA): The average of the student’s grades in the nursing course at the time of the study.

Institutional Effectiveness: Scale on the ASPS which “measures students’ academic experience, the curriculum, and the campus’s overriding commitment to academic excellence” (Noel-Levitz, 2007, p.12).

LPN-RN Accelerated Student: Student who is a Licensed Practical Nurse enrolled in a registered nursing program specifically designed for LPN’s returning to school to become eligible to take the National Council of State Boards’ examination to become a registered nurse.

Registration Effectiveness: Scale on the ASPS which “asseses issues associated with registration and billing and the extent to which the registration process is smooth and effective” (Noel-Levitz, 2007, p.12).
**Safety and Security:** Scale on the ASPS which measures the institution’s responsiveness to students’ personal safety and security on the campus” (Noel-Levitz, 2007, p. 12).

**Satisfaction:** The value indicated by a student when responding to a statement related to fulfillment of an expectation in the ASPS. All expectations are on a 7-point Likert scale and values range from very important to not important at all.

**Service Excellence:** Scale on the ASPS which “measures the areas of campus where quality service and personal concern for students are rated most and least favorably” (Noel-Levitz, 2007, p. 12).

**Delimitations**

1. Participation in the study was on a voluntary basis; therefore, those who chose not to participate may have had different perceptions than those who did volunteer to participate.

**Assumptions**

Assumptions for this study included:

1. Study participants responded honestly to survey items.

2. Study participants understood survey content on the ASPS.

**Justification**

As the number of nontraditional students, especially the accelerated nursing student, increases, so does the need for colleges and universities to become more aware of these particular students’ needs. By assimilating data that specifically relates to the nontraditional student’s needs and expectations higher education can alter services being offered and utilize the information to enhance programs and provide services that are
readily accessible to students (Boylston, Peters, & Lacey, 2004; Bryant, 2001; Hadfield, 2003; Juillerat & Schreiner, 1990; Schmid & Abell, 2003). This is especially important since the National League for Nursing Accrediting Commission (NLNAC™) has identified meeting student services needs as a standard for accreditation for schools of nursing.

In addition, institutions of higher learning require information pertaining to services that might enhance success of the nontraditional nursing student (Carroll, 2001) and ultimately provide more registered nurses to meet the health care needs of the public.

Given the dearth of information related to the nontraditional accelerated LPN-RN nursing student, data obtained from this study could be used when planning institutional programs, to enhance institutional effectiveness, and to improve student success of this understudied group of students. Knowledge of student perceptions related to the importance of specific services will allow colleges and universities to prioritize and allocate scarce resources to precise areas students view as important. The information could also be used to augment specific services that might ultimately enhance student success and institutional effectiveness. In addition, information obtained from this study could also be used by this and other educational institutions as an element of their marketing approach to prospective students.
CHAPTER II
THEORETICAL FOUNDATIONS AND LITERATURE REVIEW

Theoretical Foundations

Several models related to satisfaction (Herzberg, 1966; Herzberg, Mausner, Peterson, & Capwell, 1957; Herzberg, Mausner, & Snyderman, 1959) and student retention (Bean, 1980, 1983; Bean & Metzner, 1985; Spady, 1970; Tinto, 1975, 1988, 1993, 1997) have been developed to identify and describe variables predictive of satisfaction and leading to decisions to persist or depart from the college experience. These models provided the theoretical underpinnings of the present study. Models and studies related to satisfaction and student retention are presented in this chapter. In addition, studies addressing the relationship of student satisfaction to success and retention, nontraditional student needs, and nursing student satisfaction and needs are also presented.

Satisfaction Theory

An extensive literature review concerning job attitudes conducted by Herzberg et al. (1957) led Fredrick Herzberg and his associates to begin conceptualizing the idea that factors contributing to job satisfaction and to job dissatisfaction were not the same. Over a period of years these constructs were further developed, advanced and discussed in numerous publications and they became known as the Motivator-Hygiene Theory. As the theory continued to evolve it also became known as the Two Factor Theory. The Motivator-Hygiene Theory has since been used in numerous studies addressing satisfaction not related to the job setting.
Herzberg’s (1966) theory of satisfaction and dissatisfaction in the job setting has often been used in studies addressing satisfaction. The theory has roots stemming from Maslow’s Hierarchy of Human Needs. Herzberg (1966) describes people as having two sets of needs, one from the animal side that is centered on “the avoidance of loss of life, hunger, pain” (p. 56) and the other is “man’s compelling urge to realize his own potentiality by continuous psychological growth” (p. 56). The theory suggests that job satisfaction is perceived when factors are present that facilitate the fulfillment of higher level human needs. The theory also suggests that job dissatisfaction is closely related to the presence of factors that prevent the fulfillment of basic human needs. In other words, if higher level needs that might ultimately lead to self-actualization are present, then the worker is satisfied; and if basic human needs are met, dissatisfaction will be avoided. However, even if all basic needs are met, satisfaction will not result, only lack of dissatisfaction.

Herzberg, Mausner, and Snyderman (1959), hypothesized that work related variables which contribute to job satisfaction are separate and different from factors that contribute to job dissatisfaction. They proposed that job satisfaction and job dissatisfaction are not on the same continuum, that they are, in fact, unique and must be considered independently of each other. This theory is frequently referred to as the “Two Factor Theory.”

The “Two Factor Theory” suggests that job satisfaction and dissatisfaction consists of hygiene factors (extrinsic elements), also referred to as dissatisfiers, and motivating factors (intrinsic elements), referred to as satisfiers. The theory operates on the premise that an individual’s attitude concerning job satisfaction or dissatisfaction
operates from a neutral point on a continuum and that the presence of satisfiers (motivating factors) results in increased satisfaction and ultimately “growth and self actualization” (Herzberg et al., 1959, p. 75). The absence of satisfiers will return the individual’s attitude to a neutral point, not dissatisfaction. On the other hand, hygiene factors (extrinsic elements), referred to as dissatisfiers, can prevent dissatisfaction but “are not a valid contributor to psychological growth” (p. 75) when present (Herzberg et al., 1959). However, if these factors are absent, then the employee will not be dissatisfied; the employee will just have no dissatisfaction (Herzberg, 1966; Herzberg et al., 1959).

Hygiene factors or dissatisfiers are described as those which are associated with the milieu of the work and have little effect on positive job attitudes. Company policy, administration, supervision, salary, interpersonal relations, and working conditions are all considered dissatisfiers when the quality of these factors falls to an unacceptable level for the individual (Herzberg, 1966). Herzberg et al. (1959) suggest dissatisfiers could influence people to leave their jobs, and when conditions associated with the dissatisfiers are made acceptable those considering leaving their jobs will probably stay. However, change of conditions will not guarantee that workers will be more motivated or productive in the job setting.

The premise that external factors tend to lead to dissatisfaction in a college student population has found support in the literature. Womack (1976) found that among adult nursing students enrolled in an accelerated nursing program the extrinsic factors of working conditions, supervision, and school policy were identified as contributing to dissatisfaction. Along the same vein, Montgomery (1991) found that among community
college honors students’ dissatisfaction was related to extrinsic factors such as management and course offerings. Montgomery (1991) also found that the “challenge” category was identified as being both satisfying and dissatisfying which would typically be considered incongruent with Herzberg’s (1966) theory. This finding was explained by suggesting that those who identified “challenge” as satisfying appreciated the rigor of the classes; those who identified “challenge” as dissatisfying were more concerned with the amount of outside time and effort required to be successful in the course.

Additional support for the impact of extrinsic factors on college student dissatisfaction was presented when Strong (2005) studied nontraditional students and found academic/campus support as being least important to student satisfaction. The individual factor found to be least important was the opportunity to play sports. These findings were upheld when Boylston and Jackson (2008) studied adult students in an accelerated registered nurse to Bachelor of Science (RN-BSN) nursing program and found academic services such as computer lab access, and bookstore and business office hours to be least important to satisfaction. This was not the case when Egenes (1989) investigated nursing student satisfaction since only one hygiene/extrinsic factor was identified as a source of dissatisfaction.

Herzberg (1966) describes motivators, also known as satisfiers, as factors that relate to the activity or the work itself and can improve job satisfaction. Achievement, recognition, the work itself, responsibility, and advancement are regarded as satisfiers (Herzberg, 1966). It is suggested that one or more of these satisfiers must be present to motivate people and enhance productivity.
Much support for the premise that intrinsic factors or motivators contribute to satisfaction can be found in the literature. Womack (1976) and Boylston and Jackson (2008) found intrinsic motivators such as achievement, recognition, and the work itself as having the greatest impact on satisfaction among nursing students. Both suggested that faculty had the most important individual impact on satisfaction.

Montgomery (1991) found support for the idea that intrinsic factors can contribute to satisfaction in a student population as did Egnes (1989). Montgomery also found the category “peers” to be highly rated as impacting satisfaction. The “peers” category could be considered similar to the “interpersonal relationship” category of Herzberg (1966). This finding is incongruent with Herzberg’s theory but is explained by Montgomery as being a category that addresses the interaction that takes place during the instructional process and that it is thus part of the “work itself.” A study by Nunn (1994) adds credence to the concept that motivating factors are intrinsic by suggesting that adult students are more internally oriented and thus their satisfaction levels would likely benefit from factors Herzberg would describe as motivators.

Similarly, other studies conducted among college students (Aldemir & Gulcan, 2004; Steele, 2007) have yielded findings that lend support to the importance of motivators in improving satisfaction. Among those studies, instructional effectiveness, which is concerned with the student’s academic experiences and academic excellence, consistently ranks highly as affecting student satisfaction.

Retention Theory

College and university administrators and faculty have long been interested in the decision making process and variables related to a student’s decision to maintain
enrollment or to withdraw from an educational setting. There are several models that have been developed in an attempt to explain the decision making process (Bean, 1980, 1983; Bean & Metzner, 1985; Spady, 1970; Tinto, 1975, 1988). These models provide a framework which can be utilized to better comprehend the complexity of the decision making process involved in a student’s choice to persist or to withdraw from college.

Student retention must be considered when studying student success because it is imperative for a student to remain in an educational setting for academic success to occur. Retention theory suggests that if factors are in place to determine student needs and to assist a student in meeting social and academic integration needs, then academic progress will be enhanced.

The importance of social integration within the college setting was emphasized by Spady (1970) as being significant in influencing student persistence. Spady’s (1970, 1971) work stemmed from research conducted by Durkheim (1951) on suicide. Spady considered a decision to withdraw from one’s environment as being closely related to the decision to withdraw from an educational setting.

Five independent variables were identified by Spady (1970) as having an impact on a student’s decision to remain in or withdraw from college. Those variables were grade performance, friendship and support of peers and others, intellectual development, normative congruence, and social integration. In addition, Spady identified two intervening variables which also impacted persistence and withdrawal decisions. Those intervening variables were satisfaction and institutional commitment. Also, for students with adequate support from family and peers, an increase in satisfaction with the college
environment, improved grade performance and enhanced intellectual development was noted.

Durkheim’s (1951) suicide theory as well as Spady’s (1970, 1971) conceptual model of student attrition was later used by Tinto (1975) to develop a framework with which to explain the interaction between variables related to a student’s decision to withdraw from an academic institution. The model seeks to explain withdrawal from academic institutions, not the system of higher education, thus making it an institutional model instead of a systems model. Tinto (1975) also distinguishes between the academic and social domains of college and states that a student may be able to adequately integrate into one area and not the other; however, it is suggested that if the emphasis in one domain is excessive, then one would expect negative impact on the other.

Tinto (1975) argued that college was a social system and that college withdrawal decisions were based upon a student’s academic and social integration into the college environment much the same as a decision to commit suicide and withdraw from the social system of life is made. Tinto (1975), however, did not believe that Durkheim’s (1951) suicide theory was a predictive model of withdrawal decisions and suggested that it could only be used to describe variables surrounding the decision to withdraw. Interaction with faculty was emphasized as a method to increase the social and academic integration of students.

Tinto’s (1975) theoretical model of dropout behavior states that certain background characteristics such as gender, ethnicity, cognitive ability, and other family, academic and social experiences are present before entering college and that they influence educational expectations as well as educational and goal commitments of
students. Another important variable indicated in determining persistence in college is that of the student's commitment to the goal of actually completing the educational process at the institution. This variable is particularly important because it identifies the psychological characteristics of the student and these are "important predictors of the manner in which individuals interact in the college environment" (p. 93). The interaction between the individual's college completion goal and institutional commitment is determined to be the defining factor that determines if the individual will disengage from college and the types of disengagement behavior the individual will assume.

Tinto later acknowledged (1982) that the earlier model was deficient in certain areas. It was stated by Tinto that the original model did not adequately consider the importance of financial matters in student persistence, that it did not differentiate between behaviors that led to transfer decisions versus those which lead to permanent withdrawal, experiences related to gender, race and social status backgrounds and their impact on the educational career were under emphasized, and that the two-year community college population was not sufficiently considered.

Due to the large number of students withdrawing from their first institution of higher education and the adverse impact these withdrawals had on the colleges, Tinto later modified and expanded upon the original model of dropout behavior (Tinto, 1988). Issues and needs of the commuting student were further expanded upon due to increasing numbers of commuting students in higher education. Tinto suggested that the commuting student did not have enough time on campus to adequately integrate into the academic and social environment, thus putting them at risk of disengagement from the institution. It was suggested that when social experiences and campus involvement experiences for
students were good, that students were more satisfied and committed. At that time Tinto also included three stages of institutional persistence identified as separation, transition, and incorporation into the original model. In addition, it was again emphasized that the model was a longitudinal process beginning prior to entry into college.

Tinto's (1988) stages of institutional departure were based upon Van Gennep's (1960) rites of passage. Van Gennep (1960) suggests that fulfilling obligations of each stage serves as a reference from which to move individuals to the next stage. Completing each sequential stage provides a method to move individuals from limited youth participation to full membership in adult society. According to Van Gennep (1960) specific changes in the way an individual interacts with others occurs within each stage. Separation is identified as the first stage and it involves removing the individual from past associations; it is characterized by a decrease in relationships and communications with members of the individual's original community. Tinto (1988) suggests that the separation stage for a college student occurs when the student must disassociate himself or herself from previous communities such as high school and home life in order to become integrated into the college community. If this integration does not adequately occur, it may become so stressful for the student that he or she chose to disengage from college.

The second stage identified by Van Gennep (1960) is transition. Transition is defined as a time in which an individual begins to interrelate with members of the new group into which an association is sought. The interactions are usually different from previous ones and the individual learns how to perform and behave in a manner specific to their role in the new group. Tinto (1988) defines transition as "a period of passage
between the old and the new, between associations of the past and hoped for associations with communities of the present” (p. 444). Stress can become so severe that an individual might become overwhelmed and unable to cope, resulting in a decision to withdraw. Tinto (1988) suggests that individuals have different coping skills and educational goals and commitments and that those that cannot manage stress need assistance so that withdrawal decisions can be averted since it is the stress and not a lack of integration into the social and academic communities of college that results in disengagement.

The last stage is incorporation; it is the time in which an individual takes on new methods and patterns of interaction with individuals in the new group and actually becomes a member of the group. Interactions with the old group might begin again but they will not be as members of the old group because the individual is now a member of a new group. At this time individuals have left the past behind and are living as members of the new group. For the college student Tinto (1988) suggests that during the incorporation stage students must acquire and adopt attitudes and behaviors that are representative of the college community and establish membership in the social and intellectual communities within the college society. Social interactions are identified as the primary method through which these relationships, associations, and behaviors arise and individuals must have contact with peers and faculty. Failure to establish these contacts may lead to a lack of integration and feelings of isolation which could ultimately lead to withdrawal from the institution.

Tinto (1988) recommends that institutions of higher learning develop institutional actions to improve student retention and that retention initiatives be timed to best meet students’ changing needs and situations. In order to accomplish this it is suggested that
regular program evaluations be conducted to determine effectiveness of employed strategies and that interventions to promote persistence be implemented early in students’ academic careers. Tinto (1988) emphasizes the view “that effective retention and the involvement of individuals in the social and intellectual life of college are one and the same” (p. 453). He also suggests that an institution highly committed to students and their needs will exude an atmosphere of caring which will allow students to adequately integrate, thereby facilitating retention and academic success.

Student integration within an institution and its relationship to student persistence was further explored in Tinto’s (1993) model of student retention. Tinto suggested that integration is the absorption of individuals into a social community resulting in feelings of belonging. For college students this includes the formal, academic domains and the informal, nonacademic domains of the university environment. To be adequately integrated into the college community, students must first connect, have dialog and develop relationships with others within the institution. If integration occurs then students generally perceive the benefits of persisting to be greater than the costs of persisting. If the costs are perceived to be too great, then the student is likely to display drop out behavior by failing academically, withdrawing from higher education, or transferring to another school.

Tinto (1997) later explored the educational character of student persistence among commuting students and those with multiple personal, social, and family obligations due to the increasing number of nonresident students. Findings suggested that the epicenter of these students’ social and academic integration was the classroom since for commuting students, classrooms are typically the only place where students and faculty meet. Tinto
concluded that faculty should seek to increase collaboration among students and foster a classroom environment in which students have opportunities to bridge the academic-social divide while at the same time learning and making friends as increased integration correlates with increased persistence and learning.

The model of student withdrawal proposed by Tinto (1975, 1982, 1988, 1997) has been analyzed and critically evaluated throughout the years. Critics of the theory suggest it does not take differences within individual students and institutions into consideration (Attinasi, 1989; Pascarella & Chapman, 1983a, 1983b); therefore it might not be appropriate for the heterogeneous nontraditional student population. Some researchers found partial support for Tinto's model (Munro, 1981; Nora, 1987). Other studies have found support for the model (Condon, 1996; Dowell, 2000; Liegler, 1997; Shelton, 2000; Terenzini & Pascarella, 1977).

In contrast to theoretical models developed by Spady (1970, 1971), Tinto (1975, 1982, 1988), and Pascarella and Terenzini (1983) that focused on social integration to explain persistence and attrition of students and the assumption that when members leave any organization (work or college) they do so for similar reasons, Bean (1980) developed a model to explain attrition. Bean's (1980) model was based on the premise that organizational factors affect satisfaction and satisfaction then affects decisions to stay or withdraw from the college or university setting.

In the model of attrition Bean (1980) divided factors affecting student attrition into four groups: (a) background characteristics identified as pre-college characteristics and performance, socioeconomic status, and other demographics, (b) organizational determinants consisting of the amount of interaction with faculty and staff, decisions
concerning major, the student’s perception of treatment from the institution, GPA, goal commitment, integration, views on the student role, participation in decision making and opportunities, (c) the intervening variables, satisfaction and institutional commitment which is defined as the degree of loyalty toward membership in an organization and, (d) the dependent variable, dropout behavior.

Bean (1980) tested the model in a survey of 1,171 freshman students. In this study institutional commitment was found to be the most important variable related to withdrawal behaviors for both men and women. This finding lends support to posits stressing the importance of social integration and the educational commitment of students found in Tinto’s (1975) model. Past academic performance was the second most important variable for women and GPA for men. Additional support was also found for Tinto’s (1975) integration concepts when Bean (1980) found that women considered involvement in campus organizations as important.

Three years later Bean made modifications to his 1980 model by including variables which would lead to satisfaction and he added opportunity (availability of alternatives in the organizational environment) and the variable of marriage (Bean, 1983). Variables leading to satisfaction included grades, practical value, development (self development through education), routinization, instrumental communication (communication from the institution to students), distributive justice, and campus organization.

Bean (1983) tested revisions to his model on freshman female students and found that intent to withdraw had the greatest impact on dropout decisions. Grades and practical value were ranked second and third, respectively. Again, concepts of Tinto’s (1975,
1982, 1988, 1997) model were upheld as grades could be equated to the model as academic performance and practical value as comparable to goal commitment.

Building on previous work and the idea that nontraditional students were less interested in the social environment of the university because of other commitments, Bean and Metzner (1985), developed a conceptual model for nontraditional students. The Bean and Metzner model of nontraditional undergraduate student attrition identified multiple variables as having an effect on academic success. Those variables consisted of background variables, academic variables, and social integration variables. Background variables were identified as age, gender, ethnicity, enrollment status, high school academic performance, and educational goals. Academic variables included study skills and habits, academic advising, absenteeism, uncertainty about major, and course availability. Finances, hours of employment, family responsibilities, and opportunity to transfer, were identified as environmental variables. Social integration variables were defined as the “extent and quality of students’ interaction with the social system of the college environment” (p. 507). The effects of these variables on the nontraditional students’ psychological and academic outcomes were postulated as predictors of attrition/retention.

The Bean and Metzner (1985) model acknowledges that social integration is less important for nontraditional students than for traditional students and instead places strong emphasis on the psychological impact of environmental variables. The model posits that if these variables are positive, they will override other negative variables that might impact student retention.
When Metzner and Bean (1987) tested the model, they found increased satisfaction with the role of student correlated with increased individual student retention. Also, they found that absenteeism, poor academic performance, part time enrollment, and the intention to leave the institution increased decisions to withdraw. Overall, the study indicated that nontraditional students tended to leave school due to poor academic integration into the college setting. It was suggested that the nontraditional student would benefit from academic support services directed toward their specific needs.

Relationship of Satisfaction to Success

Factors which contribute to success have long been discussed and studied as humans are relentlessly seeking to fulfill higher level needs and ultimately achieving their individual definition of success. Herzberg et al. (1959) stated, “The conclusion from our survey of the literature of correlational studies was that there probably is some relationship between job attitudes and job output or productivity” (p. 8). With this in mind it would not be outrageous to suggest that improved satisfaction would positively impact success and achievement for nontraditional college students. However, most studies reviewed did not specifically consider satisfaction as a variable when researching student achievement or success as it related to grade point average (GPA) or testing average.

Studies by Bean (1980), Bean and Bradley (1986), Pace (1986), and Astin (1993) suggest that satisfied students tend to have better grades than those who are not satisfied. Students identified as being satisfied indicated that they felt a sense of “belonging” or “fitting in” within the university setting suggesting that they were socially integrated into the university environment.
Pace (1986) explained the association between quality of effort, achievement, satisfaction and ultimately academic outcomes by describing a circle of influence. The circle of influence was described by Pace (1986) as:

High quality effort is the best predictor of high achievement; high achievement in intellectual skills is the best predictor of high satisfaction with college; and satisfaction as well as achievement is further enhanced in an atmosphere that is friendly and supportive. (p. 293)

Environmental variables, especially satisfaction with the college, were found to be positively related to retention and grade point average when Astin (1993) studied undergraduate students. This finding adds support to the suggestion that environmental variables can promote social integration of students and thus improve satisfaction. In contrast, Malin et al. (1980) found that adult student satisfaction with college facilities was not a significant contributor to grade point average (GPA) but that it was strongly correlated with overall college satisfaction. In addition, Malin also found that students tend to be more satisfied with college if they feel good about their academic performance.

A study by Keup (2006) found that grades of new students were positively impacted when students were more satisfied. As a result of the findings, faculty and staff are encouraged to utilize tactics that facilitate student participation in the classroom and enhance student satisfaction with their college experience, especially those directly related to course requirements when attempting to improve student grades.

Early studies by Spady (1971), Tinto (1988), and Pascarella and Terenzini (1983) considered the effect of student integration into the institution and college experience and the resultant effect on academic progress. They generally explained that students
integrated into the college environment tended to be more successful and were retained as opposed to those who were less integrated. Degree of satisfaction or dissatisfaction was not independently explored as a variable affecting GPA in these studies.

Pascarella, Terenzini, and Hibel (1978) found that students’ academic performance when measured by SAT® scores and freshman cumulative GPA was significantly impacted by interactions among faculty and students. Interactions focusing on intellectual or academic matters were found to correlate most strongly with achievement (Pascarella et al., 1978). In addition, students with the most frequent interactions with faculty tended to perform better academically when compared to pre-enrollment predictors that indicated otherwise. Woodside, Wong, and Wiest (1999) found support for the concept that faculty-student interaction can positively impact student achievement when they studied a group of undergraduate students with a mean age of 27.78 years. Positive one-to-one interactions with faculty were also found to improve satisfaction and effect in class performance “very much” among both traditional and nontraditional students when Rosenthal et al. (2000) surveyed 193 undergraduate students. These findings lend credence to the idea that faculty-student interactions are important to the achievement of older students as well as the more traditional students. Additionally, some studies suggest that among female students studying science and math that the quality and amount of interpersonal and social relationships and faculty student interactions are positively associated with student success and persistence (Beder & Darkenwald, 1989; Thompson, 2001).

The relationship of satisfaction to college success among minority students has been examined in a few studies. Karemera, Reuben and Shillah (2003) examined the
effects of academic environment and background characteristics on black student performance and found that in this population there is a significant correlation between student satisfaction with the academic environment and student services and their academic performance. These findings found additional support when Heiligenthal (2005) identified satisfaction with university environment as a partial predictor of academic persistence among Latino college students. It could be inferred that at least minimal GPA requirements were achieved for students to remain enrolled. Additional research concerning satisfaction and its relationship to student retention and achievement among different student groups was suggested as a result of both of these studies.

When studying Maslow’s hierarchy of needs and how meeting those needs affected distant learning students’ success, Beise and Wynekoop (2001) found that satisfying each lower level need must have occurred before the student could seek to meet the next higher level need and that students’ academic performance was adversely impacted when the lower level needs were not satisfied. The researchers suggest that most students attempt to satisfy unmet needs such as physiological, safety, belonging, and esteem before attempting to achieve self actualization and that faculty should seek to determine where individual students are on the continuum of need achievement. This could be accomplished by conducting needs assessments and then creating a learner centered environment that would facilitate higher need satisfaction and ultimately improve student performance. Beise and Wynekoop’s findings lend support to concepts in Herzberg’s (1966) model postulating that having hygiene factors met, which are essentially lower level needs, serve to prevent dissatisfaction, that motivators or intrinsic
factors must be present for satisfaction to occur and that productivity is enhanced when individuals are becoming more self actualized.

Nursing Student Retention/Success

In light of the escalating nursing shortage, nursing faculty and educational administrators are ardently seeking methods to facilitate nursing student success. The recruitment and retention of student nurses is paramount in alleviating the looming shortage (Childs, Jones, Nugent, & Cook, 2004; Sayles, Shelton, & Powell, 2003). Regrettably, student nurse attrition has long been and continues to be a significant problem experienced by most schools of nursing (Last & Fulbrook, 2003). Retention in nursing school requires both an internal commitment and choice to remain in school as well as maintaining a required level of academic attainment (Tinto, 1993). To facilitate alleviation of the shortage, nursing schools must seek to determine causes of, and methods to prevent, disengagement of students from their educational endeavors. This is particularly difficult since it is acknowledged that nursing programs have one of the highest attrition rates of college majors (Astin, 1975).

Within the literature, academic success has been defined in many ways. Most commonly grade point average and retention until completion of the program of study are used as measures of academic success in nursing programs. Variables affecting retention and success differ from study to study but after an extensive literature review no studies were found specifically addressing satisfaction as a variable in relationship to success in a nontraditional, accelerated nursing program. For that reason this review of studies involving nursing students as the sample population will include other variables known to impact retention and success.
This review of nursing student retention and success will group studies according to variables identified as impacting retention and success. Those groups are: (a) personal variables, (b) environmental variables and (c) social and academic integration variables. These variables can be recognized in common theoretical models of retention and success. Personal variables consist of background factors, educational goal commitment (Bean & Metzner, 1985; Tinto, 1975, 1982, 1988, 1997), pre-college enrollment characteristics (Bean & Metzner, 1985), and enrollment status (Bean, 1985; Tinto, 1997). Environmental factors (Bean & Metzner, 1985) include family structure and issues, (Bean & Metzner, 1985; Tinto 1975, 1982, 1988) and finances (Bean & Metzner, 1985). Social and academic integration factors include involvement of the student in academic and social activities of the college (Bean & Metzner, 1985; Tinto 1975, 1982, 1988, 1997); included in these factors are interactions between faculty and students and academic factors (Tinto, 1975, 1982, 1988, 1992).

**Personal Factors**

Age can either positively or negatively affect retention and success. This probably can be explained because students who are more mature typically have significant responsibilities and individual roles that can diminish amount and quality of college social and academic interactions. In addition, the experiences of these individuals help to shape their attitudes and behaviors which can then impact their choices and decisions. On the other hand, these very experiences and responsibilities may have been such that the individuals are in a better position to interact academically and socially in college as well as to manage stress and time in a way that facilitates decisions to persist in educational endeavors. Studies addressing age and its effect on persistence in nursing school are
varied in findings. This could possibly be attributed to the fact that as individuals age they are exposed to increasingly large numbers of experiences and thus they become more heterogeneous.

Allen, Higgs, and Holloway (1988) and Strum (1988) found that among nursing students age was not predictive of academic success. In contrast, other studies (Houltram, 1996, McCarey, Barr, & Rattray, 2007; Ofori, 2000) found that age did matter, in fact it was indicated that the older, more mature students typically performed better academically. In fact, Houltram (1996) found that nursing students over the age of 32 years performed better academically even when compared to more qualified younger students as did Kevern, Ricketts, and Webb (1999). Similarly, Ofori (2000) found that the more mature students were also more academically successful when compared to the younger students. In this study (Ofori, 2000) findings indicated that the most mature students (over 34 years of age) performed better than each age subgroup below with students less than 20 years of age performing the worst. Additional support for age being a predictor for academic performance was found when McCarey et al. (2007) studied nursing students in the United Kingdom. The more mature students, over the age of 26 years, had better GPAs than their younger cohorts. Age was also found to be a predictor of early departure among 233 RN-BSN students studied by Dowell (2000) when findings suggested that younger students tended to withdraw more often than older students. The mean age of the student group was 37.5 years. The mean age of the early departing students was not given.

Contradictory to findings concluding that age has no effect on academic performance and those suggesting that the older more mature student performs
significantly better in nursing school, Buttry (2003) found that older students in a LPN-RN nursing class had lower GPA’s than the younger students. In addition, findings indicated that the older students did not perform as well on the NCLEX-RN™. These findings were attributed to the sample number (183). Of those, only 13.6% were under the age of 25 years and 13.6 % of the sample was reported as being 35 years of age or older. Buttry (2003) proposed that the older students tended to withdraw more often and perform inferiorly to the younger students because the older students had additional life responsibilities and the younger students were more used to studying and managing their time.

A paucity of information was available addressing gender and race as variables affecting success or persistence among nursing students. Allen et al. (1988), however, identified that among 296 generic baccalaureate nursing students the male gender was the only demographic variable that predicted a risk for earning an “F” in nursing course work. In contrast, McCarey et al.(2007) found that on one examination in the first year of nursing school males performed better than females. The author was unable to explain the finding and it was not repeated on other examinations or GPA.

Dowell (2000) found that among registered nurses returning for a baccalaureate degree ethnicity had a significant negative influence on stress. Anglo-Americans experienced less stress in life and school events than minority students. Increased stress is often associated with early departure and poor academic performance and as a result of the stress minority students are at risk for withdrawing due to personal or academic reasons. Similarly, Maville and Hureta (1997) found that increased life and school stress and less social support negatively influenced retention among 113 Hispanic and non-
Hispanic nursing students. Findings suggested that the Hispanic students had more stress than the non-Hispanic students and that the non-Hispanic students were more successful. Contradictory findings occurred when O’Conner and Bevel (1996) measured and compared stress levels of nursing students enrolled in a part-time evening program with those in a full-time day program. In this study stress was measured once at the beginning of the semester and once in the middle of the semester. Both groups were found to have high stress but no relationships were found between stress and academic outcomes.

Enrollment status is a background variable identified by Bean (1985) and Tinto (1997) as having an impact on student persistence and academic achievement. Support was found for these concepts when Benda (1991) studied traditional freshman nursing students and found that full time enrollment had a significant positive effect on persistence. In contrast, Dowell (2000) found that among RN students returning for a baccalaureate degree in nursing part time, enrollment was not significant among students who had withdrawn. However, full time students were found to be more satisfied, had more stress and family support, and had higher integration and commitment scores.

Campbell and Dickson (1996) conducted an extensive review of all nursing research authored by at least one nurse and published in a United States nursing journal or dissertation (n =162). The studies all pertained to predicting success and were conducted between the years 1981 and 1990. The authors maintain that, for cognitive indicators, final grade point average in nursing and science classes had the most significant impact on predicting student success. Other findings indicated that the most significant demographic indicators were age and parental education.
These findings were further supported when a review of the nursing and higher education literature conducted by this author revealed that pre-entry qualifications were found to be the strongest and most frequently studied independent variable in relation to nursing student success and persistence. In addition, the studies were found to generally propose that higher pre-college and pre-nursing GPA, higher scholastic testing scores, and higher high school grades, especially math and sciences positively impact nursing student success and program completion (Aber & Arathuzik, 1996; Allen et al., 1988; Benda, 1991; Canillas-Dufar, 2005; Jefferys, 2007; Kroll, 1990; Newton et al., 2007; Sayles et al., 2003; Wharrad et al., 2003; Wong & Wong, 1999).

Allen et al. (1988) studied the relationships between 40 variables and (1) GPA, (2) receiving a “D” in a nursing course, and (3) receiving an “F” in a nursing course among baccalaureate nursing students. Of the 40 variables, sixteen were found to be predictive for one or more of the outcomes with preadmission GPA and prerequisite GPA found to be the most predictive. Kroll (1990) found similar results with pre nursing GPA and cumulative GPA being the best predictors of final GPA among baccalaureate nursing students.

The findings of Allen et al. (1988) and Kroll (1990) had additional support when Aber and Arathuzik (1996) studied predictors of baccalaureate nursing student success. The students were seniors in an urban nursing program and consisted of generic and RN-BSN students aged 21-55 from five ethnic backgrounds. Study findings concluded that overall GPA was the most significant predictor of success. Other findings concluded that among this group of students, plans to attend graduate school, minimal or no financial concerns, a sense of self confidence, plans to succeed, as well as a sense of competence
in study skills and test taking also contributed to success. These factors, other than financial issues, are internally driven and suggest that self-efficacy is also a factor in nursing student success. Self-efficacy as a predictor of success lends support for Tinto’s (1975) model, as Tinto postulates that educational goal commitment and commitment to complete college is necessary for student retention.

When studying baccalaureate nursing students Newton, Smith, Moore and Magnan (2007) found that scholastic aptitude and nursing aptitude were useful predictors of academic achievement early in a nursing program. Interestingly enough, when the two variables were compared, scholastic aptitude was the greater predictor of early academic success. In the same vein, scholastic aptitude was also found to be a predictor of success among associate degree nursing students (Sayles et al., 2003). When Benda (1991) examined the relationships between variables in Tinto’s (1975) conceptual model and attrition of 522 baccalaureate nursing students, strong associations were found between higher American College Testing (ACT®) scores on the subscales of mathematics and the composite score, higher high school grades, high school rank and student persistence. These findings were in keeping with some of Tinto’s (1975) concepts. One unexpected finding was that freshman students who were retained were more likely to have chosen a major other than nursing at the time of the ACT® assessment. In Benda’s (1991) study financial concerns also tended to have a negative effect on attrition. Another study (Jeffreys, 2007) found that early academic achievement among associate degree nursing students was significantly correlated with pre-nursing GPA and Anatomy and Physiology I grades. They were not however, found to be predictive of retention, attrition, graduation or licensure in this very diverse student population.
Canillas-Dufau (2005) identified higher admission GPA's, higher anatomy and physiology, and microbiology grades, as well as higher math and pre-nursing aptitude scores as being predictive of success for nontraditional associate degree nursing students. In addition students that had a standard, non-probationary admission were more successful than those who were admitted under special circumstances. These findings supported those of Wharrad et al. (2003) when they studied predictors of success among baccalaureate nursing students in the United Kingdom.

Bean (1980) and Bean and Metzner (1985) suggest that self esteem and self confidence can positively affect student attrition and academic success. Aber and Arathyzik (1996) found support for this concept among mostly adult, nontraditional nursing students when self confidence, motivation and perseverance to succeed were established as having a significant correlation to overall GPA. Similarly, Gammon & Morgan-Samuel (2005) found that as a result of structured tutorial support, student stress was reduced and as a result self esteem increased. It was suggested that increased self esteem then leads to increased coping skills and eventually to improved academic achievement among part-time RN-BSN students.

Environmental Factors

Jefferys (1998) suggests that among nontraditional students environmental variables impact persistence and success more than academic variables. Finances as an environmental variable were considered as only one of multiple factors including academic and social variables affecting attrition and success in most studies. In the literature, inadequate financial assets were found to negatively impact nursing student attrition and academic success especially among minority students (Aber & Arathyzik,
1996; Amaro, Abriam-Yago & Yoder, 2006; Benda, 1991; Childs et al., 2004; Schropp, 2008; Yoder, 1996). In contrast, however, Jefferys (1998) found financial need resulting in the necessity of employment had no statistically significant impact on retention or academic achievement for nontraditional nursing students.

Benda (1991) found that among departed baccalaureate nursing students, financial difficulties were frequently reported by students as having an impact on their decision to withdraw. This finding gained additional support when Aber and Arathyzik (1996) studied senior baccalaureate nursing students in an urban setting and found inadequate financial assets as having a significant correlation to lower GPA. Among these students, family and child care responsibilities were also found to be a major difficulty that had to be overcome in order to persist. Dowell (2000) also found finances to be a significant concern among registered nurses returning to college to complete requirements for a baccalaureate degree. Similarly, when interviewing culturally diverse, minority nurses and faculty in an attempt to discover issues and problems involved in the nursing education process Yoder (1996) identified four categories of student needs. Those needs were personal needs, academic needs, language needs, and cultural needs. Among those, personal needs consisting of financial support and child care assistance were established as high level needs.

Another article (Childs et al., 2004) found financial need to have a significant impact on persistence of African-American students, particularly among first generation college students. Many of these students were found to have family and even extended family support obligations resulting in increased work hours often resulting in academic difficulties. Additional support for the impact of finances on persistence and success was
found when Amaro et al. (2006) conducted a study of perceived barriers and facilitators to nursing school among ethnic minority students. The students represented Latino, Portuguese, Asian, and African-American population groups. Personal needs identified in the study consisted of: (1) lack of finances, (2) insufficient time, (3) family responsibilities, and (4) language difficulties. Finances were found to be a significant barrier for most of the students. Findings of the study were consistent with previous studies of minority students as well as concepts of Tinto (1975), Bean (1980), and Bean and Metzner (1985).

Retention models by Spady (1970, 1971), Tinto (1975), Bean (1980), and Bean and Metzner (1985) suggest that family support is an important factor in decisions related to persistence. No studies were found that specifically addressed the effect of family support on retention of nursing students. However, when studying stress and social support among nursing students, Maville and Huerta (1997) found that family relationships can negatively impact Hispanic students relative to persistence. Family responsibilities and the concept “that family comes first” (p. 23) are prevalent in the Hispanic culture. As a result it is not unusual for individuals to consider the needs and desires of family before their own sometimes resulting in withdrawal behaviors. In the same vein Amaro et al. (2006) also found that family relationships can have a strong negative impact on persistence among ethnically diverse students. Jefferys (1998) also found that among nontraditional students family discord and strife can adversely affect student success and retention. Conversely, Amaro et al. (2006), Jefferys (1998), Dowell, (2000), and Carroll (2001) found that families can also provide emotional and financial support as well as motivation that can have a significant positive effect on student
persistence and success. Carroll found that family support was second to GPA in contributing to student success. It was suggested that family support can increase self-confidence, thus enabling the student to better cope with the stressors of college and positively impact attrition. In light of the conflicting findings of it becomes obvious that family relationships and stressors can either help or hinder academic undertakings.

**Social and Academic Factors**

A major construct to Spady’s (1970, 1971), Tintos’s (1975, 1988, 1993, 1997), Bean’s (1980) and Bean and Metzner’s (1985) models was the importance of socially integrating students into the college environment. Included in the social integration process were interactions with peers and faculty and involvement with campus organizations. Nursing literature is replete with findings supportive of the need for positive faculty-student interactions and student-peer relationships in fostering academic integration, persistence and success (Amaro et al., 2006; Carroll, 2001; Kearns, Shoaf, & Summey, 2004; Leroy, 2008; Liegler, 1997; Shelton, 2000, 2003; Yoder, 1996). In contrast, a study by Strum (1988) found that frequency of informal faculty contacts and discourse and the role of faculty in those interactions had no significant effect on the success of associate and baccalaureate degree nursing students. These findings were supported when Benda (1991) studied baccalaureate nursing students and found no significant relationship between positive faculty-student contact and retention.

Faculty-student interactions were not specifically studied when Yoder (1996) attempted to identify perceived barriers to nursing school success among ethnic minority nurses and faculty; however the importance of having ethnic role models was well defined. This finding suggests that having ethnic role models would facilitate positive,
more culturally sensitive, student-faculty interactions and understanding, thus promoting student integration into the academic setting. Likewise, Amaro et al. (2006) found that culturally sensitive interactions with faculty and peers could benefit students. They also found that difficult relationships could become barriers to student success. Among African-American nursing students Leroy (2008) found that feelings of isolation, lack of faculty support and unequal treatment were common and that these feelings were the result of lack of a cultural or ethnic support system and often resulted in hindering academic success.

Social interaction with peers and satisfaction with faculty as well as academic development, and satisfaction with facilities and services were found to be the most significant predictors of overall satisfaction in a study of baccalaureate nursing students by Liegler (1997). Academic integration as a result of social and faculty interactions was found to be a crucial factor in predicting overall satisfaction. Previous studies have indicated that student satisfaction is paramount when measuring student success (Astin, 1993); thus, it could be inferred that social and faculty interaction influences student success. A satisfaction study (Kearns et al., 2004) among Bachelor of Science in nursing students who already had a degree in another field that were enrolled in a web-based course found that the amount and timeliness of faculty feedback significantly impacted student satisfaction. This finding indicates that students, regardless of course design, yearn for communication and relationships with faculty and that these interactions can promote student satisfaction and success. Surprisingly, even though the students were less satisfied with the web based classes than they were with traditional classes, they indicated that they would take another web based course. This finding suggests that
environmental influences, such as convenience are also important to students and add support to Bean and Metzner’s (1985) model.

Shelton (2000, 2003) found that nontraditional associate degree nursing students who withdrew from school felt that they did not have needed faculty support as opposed to continuing students who felt that faculty were caring and supportive. The study showed that student perceptions of adequate functional and psychological support affect persistence and academic success. It was suggested that faculty should strive to provide both functional and psychological support to students in an effort to promote retention. Carroll (2001) studied associate and baccalaureate degree nursing students and graduates and found similarly to Shelton that perceptions of positive informal faculty interactions correlated with increased student persistence. Carroll explained the finding by suggesting that the informal faculty-student interactions might have led students to perceive faculty as being more caring and concerned. Social interactions among students were also found to be significantly related to student success by promoting a supportive and caring environment. An interesting finding of this study (Carroll, 2001) was that increased computer usage also resulted in improved attrition. However, student involvement in college or nursing clubs and organizations was not found to be a significant variable in student success. This finding was explained by suggesting that due to the time commitments of nursing school compounded with other responsibilities there was not enough time to become involved in additional activities.

In summary, the review of nursing literature related to factors affecting student retention and success suggests that no one variable can be identified as “the one” that, if present, would assure student retention and success. In fact, multiple factors exist and it
appears that it is the interconnectedness and interrelationship of each variable on the other that eventually impacts a student and the decision to withdraw or persist or to succeed. These factors are both internal and external, and are also culturally defined. They also generally support Spady’s, (1970, 1971), Tinto’s (1975, 1982, 1988, 1993, 1997), Bean’s (1980, 1983), Bean and Metzner’s (1985) and Metzner and Bean’s (1987) models of student attrition and retention. In addition, it seemed that many of the same factors that promoted student retention and success also positively impacted satisfaction.

Nontraditional Student Needs

In 1983, Hughes suggested that nontraditional students prefer learning experiences that are concrete, functional and realistic and a learning environment that is not formal. They are also varied in their commitment and are not campus focused. In addition, he described the nontraditional student as being responsible for self in addition to frequently being responsible for children or parents, often resulting in changing and contradictory priorities. Because of their rich and varied life and work experiences, Hughes (1983) described nontraditional students as basing their frame of reference on their lived experiences though they may have problems with study and communication skills.

Spratt (1984) interviewed and explored needs and interests of adult students. His findings supported those of Hughes (1983) by indicating that these students strive for learning experiences which incorporate life experiences. Interviews with this student population revealed that they prefer independent learning situations and that they have high levels of motivation and expectations for themselves.
While studying college student satisfaction, Landrum, Hood, and McAdams (2001) found that nontraditional college students are more concerned with campus services such as lighting and safety than are traditional students. In addition, probably due to previous financial and family commitments, they were also more concerned with financial aid information than were traditional students.

Accelerated RN - Bachelor of Science (RN-BSN) nursing students were found to rate several areas of their educational experience higher in importance to them than to traditional students in a study by Boylston, Peters, and Lacey (2004). Academic advising was rated as the most important factor in their academic educational experience. Since academic advisement can be a direct contributor to overall achievement which ultimately will affect self actualization, this finding is consistent with Herzberg’s (1966) posits. This finding is also somewhat consistent with Jarvis’s (1995) findings that teacher interaction may be more important than teaching methodology to the adult student. Registration effectiveness was rated third overall by both traditional and accelerated students, but was rated higher in importance by the accelerated group. Another area rated significantly higher in importance by the accelerated students was admissions and financial aid. Obviously, time and money are issues important to adult nursing students. Traditional students rated campus safety and security higher than the nontraditional students. This rating is inconsistent with the Landrum et al. (2001) study where the nontraditional students rated it as higher in importance. This finding suggests differences between general college students and nurses who are students.
Nursing Student Satisfaction/Needs Studies

A thorough literature review of multiple databases including ProQuest’s Dissertations and Theses, Academic Search Premier, CINAHL, ERIC, Health Source-Nursing/Academic Edition, Medline, and PsycARTICLES yielded no information specific to accelerated LPN-RN students and satisfaction. Another search using the less specific term “nursing student” and “satisfaction” identified 77 articles. Of those, only five were found to closely address student satisfaction with nursing education (Ansari, 2002a, 2002b; Espeland & Indrehus, 2003; Liegler, 1997; Norman, Buerhaus, Donelan, McCloskey, & Dittus, 2005). A few (Ansari & Oskrochi, 2006; Barrett & Myrick, 1998; Jeffries, Woolf, & Linde, 2003; Rideout, England-Oxford, Brown, Fithergill-Bourbonnais, Ingram, Benson, Ross, & Coates, 2002) were identified that addressed nursing student satisfaction and a particular aspect of nursing education. The database, ProQuest Dissertations and Theses yielded 96 possible topics with the generalized search of “nursing student” and “satisfaction.” Among the listed dissertations and theses only six were found to be generally related to this researcher’s study (Bryan, 1996; Cornell, 1984; Liegler, 1994; Richardson, 1994; Schorpp, 2008; Varvaro, 1982). Most studies were found to address satisfaction without identifying specific factors students perceived as being needed for satisfaction to occur or without identifying specific academic, social, environmental or organizational variables that specifically contributed to a student’s satisfaction with their nursing education program.

Findings from a literature search for “accelerated LPN-RN nursing student” and “student needs” were even sparser than the one addressing satisfaction. No studies were found specific to the topic, “accelerated LPN-RN nursing student”, and “needs” and only
a few were identified using the more generalized terms of "nursing student" and "needs" (Boylston, 2005; Schorpp, 2008). Other studies (Cowman, 1996; Dowell, 2000) gave brief mention to specific areas pertaining to nursing student satisfaction when exploring other topics. Given the scarce information available on nursing student satisfaction and nursing student needs, the two topics will be combined for this section of the literature review.

When addressing nursing student satisfaction most studies did not seek to determine actual student satisfaction with specific areas of the educational environment or process itself; instead, they were focused on factors predictive of student satisfaction. Ansari and Oskrochi (2006), however, sought to identify the effect that gender, disability, ethnicity, age bracket, part or full time status, academic term, academic level, pre-/post registration status, entry qualification, qualification aim, and class size had on public health student's perceptions of satisfaction on 18 different aspects of learning. Of the variables, only five (class size, full or part time status, qualification aim, pre-/post registration status and academic level) were found to explain 32% of the reported satisfaction levels. The four demographic variables were not found to have any effect on satisfaction. Part time students however, were found to be less satisfied than the full time students. Other findings suggested that satisfied students had better final grades than those who were not satisfied. Given that the five variables all directly contribute to the student's overall goal achievement, support is posited for Herzberg's (1966) theory.

Varvaro (1982) sought to identify if matching student instruction in the clinical area with preferred learning style would increase achievement and satisfaction among 45 senior baccalaureate nursing students. The study revealed no significant statistical
differences between achievement or satisfaction between those students who had been matched with teaching methods based on learning style and those who had not. High levels of satisfaction and achievement were reported for both the group matched with their preferred learning style and the group that was not matched with preferred learning style. Similarly, Jefferies, Wolf, and Linde (2003) found that there were no significant differences in knowledge level or satisfaction with learning method among nurses taught administration of a 12-lead ECG using interactive computer disk and multimedia versus traditional teaching methodologies.

Using Herzberg’s (1966) theory as a conceptual framework, Barrett and Myrick (1998) explored relationships between student nurse preceptor/preceptee job satisfaction and student nurse preceptee clinical performance. A positive relationship was found between the student nurse preceptee perceived job satisfaction and their clinical performance; however, no relationship was found between the preceptor’s job satisfaction and the preceptee’s clinical performance. Differences were identified between how preceptors and preceptees plan and evaluate patient care as well as their satisfaction with “pay” and “supervision.” These findings are not surprising given the fact that preceptees are not paid and tend to view their preceptors in a favorable light which might not always be the case with preceptor supervisors. The researchers indicated that since the instrument used in the study included the variables of “pay” and “supervision” which, according to Herzberg (1966), are extrinsic factors and are thus related to job dissatisfaction rather than job satisfaction, that the conceptual framework could be considered a limitation.
Another study examining the relationship between satisfaction and a specific aspect of nursing education was conducted by Rideout et al. (2002). The purpose of this study was to explore the relationship between nursing students graduating from a problem based curriculum and those graduating from a traditional curriculum with regard to clinical preparation, perceived preparation for clinical practice, and knowledge and satisfaction with their educational program. No statistical differences were found in relation to clinical functioning or in perceived preparation for clinical practice between students graduating from a problem based curriculum versus a traditional one. A significant difference was identified in relation to perceived level of knowledge and skill for practice. Students from the problem based curriculum generally rated themselves higher in the areas of nursing knowledge, communication, teaching-learning, theoretical knowledge, professional knowledge, and health care systems. Overall, of the 75 problem based learning graduates who took the National Registered Nurse Examination, 70 passed (93%) and 51 of 52 (98%) students who graduated from the conventional curriculum passed. These findings, however, were found to not be significant due to the small number of individual students giving written permission for the university to review individual results. Only 84% of the problem based graduates and 65% of the conventional curriculum students gave permission and when these individual results were examined, 94.4% of the problem based graduates and 94.7% of the conventional curriculum graduates passed the examination. Significantly greater levels of satisfaction were expressed for students in the problem based curriculum especially in the areas of independence, faculty relationships, and communication and problem solving skills.
When testing a causal model for predicting overall satisfaction among 195 senior and a subsample of 80 nontraditional baccalaureate nursing students, Liegler (1994) found that the best predictors of the samples' overall satisfaction were: "(1) student development and response (academic integration); (2) satisfaction with facilities and services; (3) satisfaction with the faculty component (academic integration); and (4) social integration with peers (social integration)" (p. 188). Among the nontraditional nursing students the three best predictors of satisfaction were: "(1) student development and response (academic integration); (2) satisfaction with faculty component (academic integration); (3) social interaction with faculty (social integration)" (p. 188). The fourth predictor for the nontraditional students was financial aid (college facilities and services).

Liegler (1994) found that for traditional and nontraditional students the total variance of overall satisfaction, explained by academic and social integration, was 42% and 44%, respectively. Surprisingly, among the entire sample, external influences including external encouragement, current marital status or changes in marital status, number of dependents, and time spent on work, family, or home responsibilities were not predictive of satisfaction nor were encouragement from parents, spouses, or significant others. However, among the nontraditional students, encouragement from friends not associated with the college was predictive of both academic and social integration. These findings support Metzner and Bean's (1987) proposals that for nontraditional students, factors external to the college/university setting may significantly affect outcomes and that family responsibilities are not significant predictors of satisfaction. Support is also generated for Tinto's (1987) integration model which stressed the influence of external factors on student actions. It could also be argued that the external support and
encouragement from persons away from the academic environment also adds support for Herzberg's (1959, 1966) theory postulating that satisfaction is improved by intrinsic motivators, as the encouragement of persons away from the academic environment could be perceived as a type of personal recognition.

Liegler's (1994) study also found that overall satisfaction was affected by both age and previous nursing certifications. In addition, as the nontraditional student's age increased, beginning with the age of 26 years, student satisfaction improved as faculty interaction increased. However, when faculty components such as advising, content knowledge, teaching talent, and clinical experience were also entered, social interaction with faculty became less significant. Interaction with peers was found to not be predictive of satisfaction for this population.

Student involvement (Liegler, 1994) with extracurricular activities was extremely low for both traditional and nontraditional nursing students. It was also found to have a low, positive significant relationship to overall satisfaction for traditional nursing students. In contrast, however, no significant relationship was found between involvement with extracurricular activities and satisfaction for the nontraditional students.

Seven college facilities and services had the strongest indirect predictive value on overall student satisfaction (Liegler, 1994). Health centers, computer labs, learning and tutorial centers, bookstore services, nursing skills labs, course availability, and libraries were found to contribute the most among identified college services and facilities to overall satisfaction. Within the nontraditional student subgroup, financial aid was identified as having the strongest indirect effect on overall satisfaction (through social
and academic integration). The significance of financial resources lends support to Bean and Metzner's (1985) model suggesting that financial difficulties impact student attitudes and decisions. In contrast, Herzberg (1966) postulates that external influences lead only to no dissatisfaction, that they do not lead to satisfaction. Based on the differences in findings between the traditional and nontraditional nursing student populations, Liegler (1994) suggested that nontraditional student groups be studied separately from traditional groups.

Academic findings, including student development and satisfaction with faculty, were found to comprise two of the best predictors of overall satisfaction (Liegler, 1994). The author suggested that based on these findings schools of nursing should strive to challenge and stimulate students academically and that knowledgeable, clinically experienced, and talented faculty should be actively recruited and developed.

A study to identify factors influencing 176 baccalaureate nursing students' satisfaction with the college student role was initiated by Bryan (1996). This study saw student satisfaction as being the result of facets identified as intention (goal), cognition, value appraisal, goal accomplishment, and emotion (satisfaction). The mean age of the students was 28 years with a standard deviation of 7.6 years; 85 or 49% of the students were considered traditional and were in the age range of 19-24 years; 90 students or 51% of the sample population were considered nontraditional.

Results of the Bryan (1996) study were generally nonspecific. Findings indicated that marital status, previous health care experience, previous degrees, and children were not significant in student role satisfaction. However, married students and students with previous health care experience did have greater variability in their responses. The
researcher explained that the differences were likely due to life experiences. Among three subgroups based on clinical level no significant differences in satisfaction were indicated.

Motivation to study was found to account for 24% of the variability in global student role satisfaction and when institution fit was combined with motivation to study, 31% of the variance of student satisfaction was accounted for. Children at home and participation in the student nurse association combined with motivation and fit explained a total variance of 33%, leaving 67% of student role satisfaction unexplained (Bryan, 1996). These findings suggest that student role satisfaction is affected by multiple factors that were not identified and are yet to be determined.

The demographic variables of gender, disability, ethnicity and age were examined relative to how they influenced 460 multidisciplinary health care students' satisfaction with their courses in a study by Ansari (2002a). Gender, disability, and ethnicity were found to not have a statistically significant relationship to student satisfaction. Age brackets were used to group the students by age. As a result, differences in satisfaction were apparent for greater than 75% of the variables. Older mature (greater than 25 years) students were found to be most satisfied. They were followed by mature (21-25 years) students with traditional (less than 21 years) students being the least satisfied. These findings supported those of Ofori (2000) suggesting that student age is an important factor when studying student satisfaction. An additional finding of the study (Ansari, 2002a) was that there was a slight relationship between a student's course ratings and their course grades. In fact, indications were that, as student satisfaction with any of the dimensions under study decreased, so did their course grade.
The second part of Ansari's (2002b) study dealt with the effects of three academic variables on perception and satisfaction levels of students. The academic variables were identified as academic level (level 1 or level 3), mode of study (part time or full time), qualification aim (degree sought – diploma, BA or BSc.) on perceptions and satisfaction levels of students enrolled in the courses. Findings of the study indicated that level 3 students felt that the courses should be more stimulating, that faculty should be more knowledgeable, and that library resources should be expanded. In addition, part time students were found to need more faculty attention than fulltime students and participants seeking a diploma instead of a degree were the most satisfied. These findings are supportive of those of Metzner and Bean (1987) when they also found that part time students require additional resources to be successful.

Espeland and Indrehus (2003) conducted a study to measure student satisfaction with nursing education in Norway. The study found that students were slightly dissatisfied with their nursing program overall but were satisfied with the clinical portion of their nursing education. Specific variables were not identified as independent variables impacting satisfaction; however, for the clinical area it was found that students were more satisfied with their clinical preceptors than with faculty supervision and that they found faculty in the clinical area to be more challenging than the preceptors. The study also demonstrated that by meeting a learner's needs in both the classroom and clinical areas that satisfaction can be positively impacted. Recommendations were made to implement additional research pertaining to nursing student’s satisfaction with nursing education in other countries.
In contrast, when Norman et al. (2005) conducted a study focusing on American students they found most (86%) nursing students to be satisfied with their nursing education; in fact, 38% were very satisfied. They did however, find that more students who were already going to clinical sites in their nursing education programs had greater levels of satisfaction than those who had yet to experience the clinical portion of nursing education and, that when basic learning needs such as classroom space, support, and advisement from experienced faculty were met, learning outcomes were enhanced. Also, in contrast to Ansari’s (2002a) findings, they found that older students were less satisfied than the younger students.

The Noel-Levitz Adult Student Priorities Survey™ (ASPS™) was used by Boylston (2005) to determine accelerated RN-BSN student needs and satisfaction with college services. The ASPS™ grouped student responses into one of eight composite scales. Those subscales included academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence. The composite scales of instructional effectiveness and academic advising were ranked highest in terms of importance on the satisfaction scale. Other composite areas ranking high in importance included campus climate and service excellence. Academic advising and campus climate were both rated highest in satisfaction with instructional effectiveness, safety and security and registration effectiveness following. Admissions processes and financial aid services were found to exhibit the greatest performance gap between importance and satisfaction.

The top five highest ranked specific items of importance to students were, in descending order, a knowledgeable advisor, knowledgeable faculty, safe and secure
classrooms, and quality instruction. The top five highest ranked items in terms of satisfaction were, in descending order, safe and secure classrooms, availability of advisor, convenient classes, unbiased and fair faculty, and enrollment tasks in one location (Boylston, 2005). Relationships and interaction with faculty are identified as important to this accelerated group of nontraditional students; this finding gives additional support to Bean's (1980) model. The high rankings in importance of knowledgeable advisors and faculty to students are items that ultimately and directly impact the ability of a student to be successful. Keeping in mind that achieving self actualization is the pinnacle of motivation, one might consider specific items such as knowledgeable advisors and faculty as directly contributing to a student's ability to be successful academically as supporting Herzberg's (1959, 1966) model.

Schorpp (2008) developed an instrument to measure a student's perceived importance of needs and satisfaction with the educational experience. Five subscales/concepts based on Maslow's theory were conceptualized and identified as: basic learning needs (fundamental and essential educational resources); safety and security needs (well being and protection); belonging to the college community needs (inclusion and kinship; esteem needs (recognition of self and others); and self actualization needs (academic achievement and achievement of goals in the nursing program). The instrument was found to have strong internal consistency for total scores (α = .93 for Part 1, Importance and α = .95 for Part 2, Satisfaction). All subscales were also found to have high internal consistency reliability with ranges from .64 to .84.

Predictor variables were identified by Schorpp (2008) as being: (1) perceived importance of educational needs and (2) satisfaction with the educational experience.
Outcome variables were stated to be academic achievement (GPA) and perceived self actualization. Study results revealed that students placed the most importance on the needs statements that identified with aspects of the educational process that they believed to be most necessary for academic success to occur. These items fell under the subscale of 'Self Actualization Needs'. The study also revealed that lowest satisfaction occurred under the subscale 'Safety and Security Needs'. Included in these needs were the resources necessary for preparing, practicing and mastering clinical skills. Three of the identified most important needs statements were part of the subscale 'Basic Learning Needs'. Ten of the least important needs fell under the subscale 'Belonging to the College Nursing Community Needs'. The need for knowledgeable, full time faculty was rated as most important by the students and convenience of campus clubs; organizations and events were ranked as least important.

Schorpp's (2008) findings revealed that six of the most satisfied needs fell under the subscale 'Basic Learning Needs.' Educational resources, including the library and internet were rated as the needs students were most satisfied with. The remaining four needs fell under the subscale 'Self Actualization Needs.' The 'Safety and Security Needs' subscale contained four of the items rated as least satisfied with 'adequate financial aid is available' rated as least satisfied. The Schorpp (2008) study also revealed that female, White/Caucasian nursing students had higher GPAs than Black/African/American students as well as students who worked less than 20 hours a week. In addition, nursing students with children in the home also reported higher GPA's. Schorpp (2008) postulates that students' “satisfaction with the education experience relates to their self actualization of program goals” (p.136). Study findings generally supported concepts in
Herzberg's (1966) theory. On the whole, students rated needs statements as important with a total mean score of 3.66. Satisfaction had a total mean score of 3.00. The author explained that the lower means for satisfaction when compared to the means for importance could have been attributed to the fact that students expect education accomplishments to fulfill self determined goals and aspirations and therefore place a great deal of accountability on educators to guide and facilitate the achievement of these goals. In addition, when perceptions of needs not being adequately met occur, then feelings of less satisfaction could result as indicated by mean differences between needs importance and needs satisfaction.

Nursing student needs were also explored when Krawczyk (1997) conducted a study among 375 BSN degree nurses to determine degree of importance placed on factors related to educational pursuits. Those factors were accreditation, cost, flexibility, location, method of earning credit, student profile, quality, progression to master's degree, and resources. No matter what type of nursing program they were in, public, or private, the students chose cost as the most important factor in their educational pursuits.

Summary

Job satisfaction and its impact on performance has long been studied but the implications for meeting student needs and thus improving satisfaction and ultimately impacting success is a relatively new arena for thought, and little research is present to address it. Some studies lend support to the concept that external factors can lead to dissatisfaction in the student population (Beise & Wynekoop, 2001; Heiligenthal, 2005; Karemera et al., 2003; Montgomery, 1991) and others do not (Egenes, 1989). This concept is well documented in the job setting (Herzberg, 1966; Herzberg et al., 1959,
Intrinsic factors have been found to motivate or satisfy in the student population (Egenes, 1989; Keup, 2006; Metzner & Bean, 1987; Montgomery, 1991; Rosenthal et al., 2000; Woodside et al., 1999) and support has been found for these same findings in the job setting (Herzberg, 1966; Herzberg et al., 1959, 1993).

There is little information available pertaining to the impact of the variable “satisfaction” on success as it specifically relates to GPA. Only a few studies posited that satisfied students tended to have better grades (Astin, 1993; Bean, 1980; Bean & Bradley, 1986; Heiligenthal, 2005; Keup, 2006). Much of the research focused on social integration of students and its relationship to retention (Amaro et al., 2006; Bean, 1983; Bean & Metzner, 1985; Carroll, 2001; Kearns et al., 2004; Keup, 2006; Leroy, 2008; Liegler, 1997; Metzner & Bean, 1987; Pascarella et al., 1975; Pascarella & Terenzini, 1983; Shelton, 2000, 2003; Spady, 1970, 1971; Tinto, 1975, 1982, 1988, 1993, 1997; Yoder, 1996). Other researchers explored the relationships of psychological and environmental variables on retention (Bean & Metzner 1985; Beise & Wynekoop, 2001; Benda, 1991; Jeffery, 1998; Heiligenthal, 2005; Tinto, 1975, 1982, 1988, 1997).

A dearth of information is available relative to satisfaction, success, and needs of LPN-RN students; however, research reveals that nontraditional student needs generally revolve around several areas: advising, safety and security, financial aid, admission and registration issues, and personal relationships (Boylston, 2005; Boylston et al., 2004; Jarvis, 1995; Landrum et al., 2001). Given the diversity and increasing numbers of LPN-RN students, additional information on this population is needed. The future of healthcare is dependent on increasing the number of RNs and accelerated LPN-RN programs of study are one method of meeting this need. By becoming more aware of the LPN-RN
student needs, educational institutions and faculty can address those needs, thus improving satisfaction and perhaps ultimately increasing the number of RNs.
CHAPTER III
METHODOLOGY

The purpose of this study was to explore accelerated LPN-RN student-perceived levels of importance and satisfaction with student services at the institution and the impact that satisfaction had on success. Levels of importance and satisfaction were measured using the Noel-Levitz Adult Student Priorities Survey™ (Noel-Levitz ASPS™; Appendix A). Each student’s level of satisfaction was compared to their current nursing course grade point average (GPA) at the time of the survey.

This population was selected because of the paucity of research currently available to guide faculty and administrators when planning and implementing educational activities for the accelerated LPN-RN student. Without current data, uneducated assumptions about these students and their needs may result in poor academic performance and inadequate institutional resources directed to these students.

Design

The research design used in this study was exploratory DESCRIPTIVE and correlational in nature. This study was designed to present and describe the items of importance in terms of academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence for LPN-RN accelerated students. The study sought to explore how student satisfaction correlated with student success (defined as current nursing course GPA) in the LPN-RN program.
Setting

The setting for this study was two campuses of a large community college in a southern state.

Sample

The target population for this study was 73 accelerated LPN-RN nursing students enrolled in a large community college in a southern state. The sample was voluntary and one of convenience and consisted of 60 participants. All participants had already successfully completed at least one year of post high school education in a college, vocational, or career school environment for which a certificate of completion in practical nursing was awarded. They also had passed the National Council of Nursing Licensure Examination for Practical Nurses (NCLEX-PN™) examination and were licensed practical nurses. In addition, they have been employed as a LPN.

Data Collection Plan

An application was submitted to the Human Subjects’ Review Committee (HSRC) (see Human Subjects Review Form; Appendix B) at the University of Southern Mississippi to ensure that all rights of the participants were protected. Once approval was received from the HSRC (see IRB Approval; Appendix C) permission to conduct the study was obtained from Deans and other appropriate officials of the LPN-RN accelerated program allowing the accelerated LPN-RN students to participate in the study (Permission to Conduct Study; Appendix D) Once permission was received from the appropriate persons, the investigator delivered a sealed packet to a designated faculty member at each campus with LPN-RN accelerated students of the selected school of nursing. The packet contained a cover letter describing the study and an authorization to
participate in the research study (Cover Letter; Appendix E, Authorization to Participate; Appendix F). The packet also contained a Noel-Levitz Adult Student Priorities Survey™ (Noel-Levitz ASPSTM; Appendix A) for each student being surveyed. The designated faculty member was asked to read the cover letter to the students and to distribute the survey instruments to the LPN-RN accelerated students. The designated faculty member instructed students to utilize their student identification number on the survey form instead of their social security number so that individual surveys could be linked to individual GPA's. The time and place of the packet distribution to students was designated by the appropriate authority at the school of nursing. Completion of the survey instrument was estimated to take approximately 30 minutes. Students were asked to place completed surveys in an envelope provided for that purpose. The investigator then collected the envelope from the designated faculty member and maintained it in a secure, locked area until it was shipped.

The completed surveys were shipped to USA Group Noel-Levitz for scoring. A data disk and a report comparing the LPN-RN accelerated students to the national comparison group were returned to the investigator. In addition, the individual student surveys were returned to the investigator so that individual survey responses could be analyzed relative to individual student GPA.

Data Analysis Plan

The following plan was used to analyze data:

Research question 1: What are the items of importance in terms of academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security,
and service excellence for students enrolled in an accelerated LPN-RN program?

Descriptive summary measures including frequency counts, mean, and standard deviation were used to summarize the perceived needs of the nontraditional accelerated LPN-RN students.

Research question 2: What are the levels of satisfaction in terms of academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence for students enrolled in an accelerated LPN-RN program?

Descriptive summary statistics were used to summarize perceived levels of satisfaction of the nontraditional LPN-RN accelerated students.

H1: There is a statistically significant relationship between LPN-RN accelerated student GPA and satisfaction as measured by the subtests of academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence.

Instrument

The instrument used for data collection was the Noel-Levitz ™ Adult Student Priorities Survey (see Noel-Levitz ASPS; Appendix A). The ASPS™ instrument was selected because it focused specifically on the adult student aged 25 years or older enrolled in evening, weekend, continuing education, credit and non credit, or graduate programs (Noel-Levitz, 1998-2008). In addition to the ASPS™ the researcher used correlational statistics to determine if a correlation existed between each of the 8 scales and the student’s current grade point average (GPA).
The ASPS™ is reported to have a high reliability with a Cronbach’s coefficient alpha for importance scored as 0.93 and for satisfaction items scored as 0.90. The test-retest reliability estimate of mean importance scores and mean satisfaction scores is 0.82 and 0.81, respectively. Validity of the ASPS™ is also reported to be high with a Pearson correlation of 0.74 for importance and 0.67 for satisfaction (p < .0001). Qualitative assessment of the instrument is reported as a mean cross-method validity coefficient of 0.66 for importance scores and 0.62 for satisfaction scores; the individual scale correlations between interview responses and the survey responses range from 0.91 to 0.53 for importance scales and from 0.82 to 0.47 for the satisfaction scales. All scale correlations were reported as significant at the .05 level, thus indicating that the instrument adequately reflects the construct it is designed to measure (Noel Levitz, 2008b).

The ASPS™ measured two outcomes along a 7 point Likert scale for 50 survey items. The outcomes were: “importance to me” and “my level of satisfaction.” The “importance to me” score ratings indicated the degree of importance the expectation was to the student. The “my level of satisfaction” score ratings indicated how satisfied the student was that the institution had met the expectation. The difference between the importance and satisfaction ratings indicated the performance gap. An additional 20 researcher defined items could have been included to address specific interests or needs of the researcher. The additional questions were not included for the study. The instrument also included 10 items related to enrollment decisions, two items related to overall expectations and satisfaction and 14 related to demographics (Noel-Levitz, 2000).
The items on the ASPSTM were statistically and conceptually analyzed to form eight scales identified as academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence. Each scale consisted of several statements to which students responded. Composite scores related to the data were provided for each scale.

The academic advising effectiveness scale was described by Noel-Levitz (2008a) as one which “assesses the comprehensiveness of the academic advising program, evaluating advisors’ knowledge, competence, approachability, and personal concern for students” (p. 12). Item numbers on the ASPS that make up this scale are identified as 8, 11, 19, 28, 41, 44, and 50 (Noel-Levitz, 2009).

Academic services were defined as those which assess “services students utilize to achieve their academic goals” (Noel-Levitz, 2008a, p.12). Those services included the bookstore, library, computer and learning labs, and study areas. Item numbers 12, 15, 30, 38, and 47 made up the academic services scale (Noel-Levitz, 2009).

Noel-Levitz (2008a) explained admissions and financial aid effectiveness as services that measure “the extent to which admissions counselors are competent and knowledgeable, along with students’ perceptions of the effectiveness and availability of financial aid programs” (p.12). This scale consisted of item numbers 6, 10, 23, 25, and 34 on the ASPSTM and included timeliness and response to questions and inquiries concerning financial aid (Noel-Levitz, 2009).

The campus climate scale was explained by Noel-Levitz (2008a) as measuring “the extent to which the institution provided experiences that promote a sense of campus
pride and belonging" (p.12). The ASPSTM item numbers 1, 2, 5, 7, 21, 24, 27, 29, 33, and 50 made up the responses for the campus climate scale (Noel-Levitz, 2009). These items included responses indicating that the students felt cared for and that their needs were important and responded to in a timely manner.

The measurement of "students’ academic experience, the curriculum, and the campus’s overriding commitment to academics excellence” (Noel-Levitz, 2008a, p.12) constituted the instructional effectiveness scale. Instructional effectiveness responses were item numbers 2, 4, 14, 24, 26, 32, 35, 37, 40, 41, 42, and 49 (Noel-Levitz, 2009). Issues addressed included faculty availability and caring attitudes toward students as well as timely feedback, fair evaluation, and value of what was taught.

Noel-Levitz (2008a) considers registration effectiveness as “assessing issues associated with registration and billing and the extent to which the registration process is smooth and effective” (p.12). The availability and scheduling of classes was included in the scale as well as the convenience of the registration process and the hours of operation of the business office. Registration effectiveness was measured by items 9, 16, 17, 20, 31, 43, and 45 on the ASPSTM (Noel-Levitz, 2009).

Measurement of the “institution’s responsiveness to students’ personal safety and security on campus” (Noel-Levitz, 2008a, p.12) compromised the scale titled safety and security. Adequate parking as well as safe and secure parking and classrooms were addressed within this scale. Items on the ASPSTM identified by Noel-Levitz (2009) measuring safety and security were numbers 5, 13, 18, and 22.

The service excellence scale was defined by (Noel-Levitz, 2008a) as measuring “the areas of campus where quality service and personal concern for students were rated
most and least favorably” (p.12). Items on the ASPSTM addressing service excellence are 7, 29, 33, 39, 46, and 48 (Noel-Levitz, 2009). This scale mostly measured how the institution addressed student concerns and the timeliness of response to student issues.
CHAPTER IV
ANALYSIS OF DATA

Introduction

Chapter four presents findings of a descriptive study using the Noel Levitz™ Adult Student Priorities Survey (Noel-Levitz ASPS™; Appendix A) and the correlation of those findings to student current course GPA. The ASPS™ identified levels of importance and satisfaction that students placed on specific aspects of their student experience. Importance and satisfaction were rated on the ASPS™ using a seven point Likert scale with seven (7) being considered the highest rating and one (1) the lowest. Findings concerning perceived student importance and satisfaction from an analysis of eight ASPS™ inventory scales identified as: academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence were included as well as the correlation of each of these scales to individual student GPA.

Description of Sample

The sample consisted of 60 volunteer accelerated LPN-RN students out of a population of 73 students. There was an 82.19% return rate of the survey tool. Six students returned an instrument with data that was not viable due to incomplete responses. A total of 54 respondents returned an instrument with viable data. The gender of the majority of the participants was female (88.3%) and most (55%) were aged between 25 and 35 years. Race, on the other hand was closely divided between African Americans and Caucasians with 48.3% of the respondents indicating they were African
American and 45.0% indicating they were Caucasian. Additional demographic information related to gender, age, and race of the participants is depicted in Table 1.

Table 1

*Gender, Age, and Race of Participants (N=60)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>53</td>
<td>88.3</td>
</tr>
<tr>
<td>Male</td>
<td>6</td>
<td>10.0</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 and under</td>
<td>6</td>
<td>10.0</td>
</tr>
<tr>
<td>25 to 34</td>
<td>33</td>
<td>55.0</td>
</tr>
<tr>
<td>35 to 44</td>
<td>15</td>
<td>15.0</td>
</tr>
<tr>
<td>45 and over</td>
<td>6</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>29</td>
<td>48.3</td>
</tr>
<tr>
<td>Asian-Pacific Islander</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Caucasian</td>
<td>27</td>
<td>45.0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1.7</td>
</tr>
</tbody>
</table>
Most participants classified themselves as full-time (65%) evening (83.3%) students in their second year of study (91.7%) with a GPA of 3.0-3.49 (56%). There was likely some misunderstanding among participants relative to enrollment status since the sample was enrolled in a LPN-RN program with classes offered only in the evening with required clinical activities conducted on the weekends. In addition, it is plausible to question the data concerning enrollment status since the LPN-RN program was only offered as a part-time program of study. If students are in fact full-time students they are not enrolled in additional course work required for the LPN-RN program of study and it would be for other reasons including but not limited to requirements needed to complete an additional degree program or course of study. Participants were also probably confused as to class level since all students must have already completed at minimum, a one-year course of study prior to enrollment in the LPN-RN program and the LPN-RN program is a one year, three semester program. GPA was also either misunderstood or incorrectly reported by at least one student since all students are required to have completed several college courses that award grades prior to enrollment in the LPN-RN program. Data related to enrollment status, class load, class level, and GPA of participants is depicted in Table 2.

Information pertaining to participant’s educational goals, employment status and preferred educational institution is presented on Table 3. The majority (88.3%) of the participants indicated that their educational goal was to obtain an Associate Degree and that they were enrolled at the educational institution of their first choosing (85%). Most (70%) were also employed full time off campus.
Table 2

*Enrollment Status, Class Load, and Class Level of Participants*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Enrollment Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Evening</td>
<td>50</td>
<td>83.3</td>
</tr>
<tr>
<td>Weekend</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>Current Class Load</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>39</td>
<td>65.0</td>
</tr>
<tr>
<td>Part-time</td>
<td>20</td>
<td>33.3</td>
</tr>
<tr>
<td>Class Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First year</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Second year</td>
<td>55</td>
<td>91.7</td>
</tr>
<tr>
<td>Graduate/Professional</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>Current GPA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No credits earned</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>2.0 to 2.49</td>
<td>4</td>
<td>6.7</td>
</tr>
<tr>
<td>2.5 to 2.99</td>
<td>13</td>
<td>21.7</td>
</tr>
<tr>
<td>3.0 to 3.49</td>
<td>34</td>
<td>56.7</td>
</tr>
<tr>
<td>3.5 or above</td>
<td>5</td>
<td>8.3</td>
</tr>
</tbody>
</table>
Table 3

*Educational Goal, Employment, and Preferred Educational Institution*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Educational Goal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate degree</td>
<td>53</td>
<td>88.3</td>
</tr>
<tr>
<td>Transfer to another institution</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Doctorate or professional degree</td>
<td>4</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time off campus</td>
<td>42</td>
<td>63.3</td>
</tr>
<tr>
<td>Part-time off campus</td>
<td>10</td>
<td>16.7</td>
</tr>
<tr>
<td>Full-time on campus</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Not employed</td>
<td>7</td>
<td>11.7</td>
</tr>
<tr>
<td><strong>Preferred educational institution</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st choice</td>
<td>51</td>
<td>85.0</td>
</tr>
<tr>
<td>2nd choice</td>
<td>8</td>
<td>13.3</td>
</tr>
<tr>
<td>3rd choice or lower</td>
<td>1</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Overall, the participants were married and had children (46.7%). They also owned their own home (63.6%) and lived in the state where they attended school (98.3%). Table 4 presents additional information related to marital status and residence.
Table 4  

*Marital Status, Current Residence, and Residence Classification*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>13</td>
<td>21.7</td>
</tr>
<tr>
<td>Single with children</td>
<td>9</td>
<td>15.0</td>
</tr>
<tr>
<td>Married</td>
<td>8</td>
<td>13.3</td>
</tr>
<tr>
<td>Married with children</td>
<td>28</td>
<td>46.7</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Current Residence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own house</td>
<td>38</td>
<td>63.3</td>
</tr>
<tr>
<td>Rent room/house/apartment</td>
<td>15</td>
<td>25.0</td>
</tr>
<tr>
<td>Relatives’ home</td>
<td>4</td>
<td>6.7</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Residence Classification</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-state</td>
<td>59</td>
<td>98.3</td>
</tr>
<tr>
<td>Out-of-state</td>
<td>1</td>
<td>1.7</td>
</tr>
</tbody>
</table>
Research Question 1

What are the items of importance in terms of academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence for students enrolled in an accelerated LPN-RN program? Respondents indicated that of the eight scales, instructional effectiveness was most important with a mean of 6.57. Campus climate and registration effectiveness followed closely with means of 6.52, and 6.51, respectively. The least important scale indicated by the respondents was that of academic services followed by academic advising. Means were 6.29 and 6.41 respectively. The scale means ranged from a low of 6.29 to a high of 6.57; this narrow range indicated that most students perceived all eight scales as important. Standard deviations of each of the scales ranged from a low of .50 to a high of .79. Table 5 depicts the means and the standard deviations relative to importance to students of each of the eight scales.
Table 5

*Importance to Student - Scales, Means, and Standard Deviations (N=54)*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Effectiveness</td>
<td>6.57</td>
<td>.50</td>
</tr>
<tr>
<td>Campus Climate</td>
<td>6.52</td>
<td>.52</td>
</tr>
<tr>
<td>Registration Effectiveness</td>
<td>6.51</td>
<td>.57</td>
</tr>
<tr>
<td>Admission &amp; Financial Aid Effectiveness</td>
<td>6.46</td>
<td>.63</td>
</tr>
<tr>
<td>Safety &amp; Security</td>
<td>6.45</td>
<td>.63</td>
</tr>
<tr>
<td>Service Excellence</td>
<td>6.43</td>
<td>.64</td>
</tr>
<tr>
<td>Academic Advising Effectiveness</td>
<td>6.41</td>
<td>.66</td>
</tr>
<tr>
<td>Academic Services</td>
<td>6.29</td>
<td>.79</td>
</tr>
</tbody>
</table>

Note. Scale 1-7

Research Question 2

What are the levels of satisfaction in terms of academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence for students enrolled in an accelerated LPN-RN program? The findings indicated that the students were most satisfied with instructional effectiveness followed by safety and security. The means were 6.02 and 5.97, respectively. Students were least satisfied with academic services and admissions and financial aide. Means for those scales were 5.44 and 5.57, respectively. The standard deviations ranged from .88 to 1.06.
Again, the means and range of standard deviations was narrow indicating either that most all students were satisfied or perhaps they were not entirely truthful in their responses or maybe they did not understand how to respond on the instrument. The means and standard deviations of each of the eight scales pertaining to satisfaction can be found in Table 6.

Table 6

*Student Satisfaction – Scales, Means, and Standard Deviations (N=54)*

<table>
<thead>
<tr>
<th>Scales</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Effectiveness</td>
<td>6.02</td>
<td>.88</td>
</tr>
<tr>
<td>Safety and Security</td>
<td>5.97</td>
<td>1.04</td>
</tr>
<tr>
<td>Campus Climate</td>
<td>5.94</td>
<td>.95</td>
</tr>
<tr>
<td>Registration Effectiveness</td>
<td>5.79</td>
<td>1.03</td>
</tr>
<tr>
<td>Academic Advising Effectiveness</td>
<td>5.69</td>
<td>1.17</td>
</tr>
<tr>
<td>Service Excellence</td>
<td>5.66</td>
<td>1.16</td>
</tr>
<tr>
<td>Admissions &amp; Financial Aid Effectiveness</td>
<td>5.57</td>
<td>1.24</td>
</tr>
<tr>
<td>Academic Services Effectiveness</td>
<td>5.44</td>
<td>1.06</td>
</tr>
</tbody>
</table>

Note. Scale 1-7
In addition to the narrow range of perceived importance and satisfaction of each of the scales the students also had a narrow range of GPA’s for the current nursing course. The GPA’s ranged from a low of 75 to a high of 98 with a mean of 86.43. The standard deviation was 4.5. It was noticed at the time of data collection that students with the lowest GPA’s chose not to participate in the study. No reason was given for their choosing not to participate.

Hypothesis 1

There was no statistically significant relationship between LPN-RN accelerated student GPA and satisfaction as measured by the subtests of academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence. The hypothesis was not accepted \(F (8, 45) =1.00, p= .447, R^2= .15\).

Ancillary Findings

The relationship between current nursing course grade point average and satisfaction with each scale was found to be not significant as a whole or individually. However, a slight negative relationship was noted between admissions and financial aid satisfaction and course GPA (-.63) and between instructional effectiveness and course GPA (-.53). Service excellence was noted to have the greatest positive correlation to GPA (.63) even though it was not statistically significant. Table 7 presents the standardized coefficients and standard of error related to student satisfaction and the variable of current course GPA.
Table 7

*Student Satisfaction - Standardized Coefficients, Standard of Error with Dependent Variable of Grades (N=54)*

<table>
<thead>
<tr>
<th>Scales</th>
<th>Standardized Coefficients</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions &amp; Financial Aid Effectiveness Satisfaction</td>
<td>-.63</td>
<td>.12</td>
</tr>
<tr>
<td>Instructional Effectiveness Satisfaction</td>
<td>-.53</td>
<td>.23</td>
</tr>
<tr>
<td>Safety &amp; Security Satisfaction</td>
<td>.03</td>
<td>.23</td>
</tr>
<tr>
<td>Registration Effectiveness Satisfaction</td>
<td>.03</td>
<td>.93</td>
</tr>
<tr>
<td>Academic Advising Effectiveness Satisfaction</td>
<td>.07</td>
<td>.84</td>
</tr>
<tr>
<td>Campus Climate Satisfaction</td>
<td>.18</td>
<td>.80</td>
</tr>
<tr>
<td>Academic Services Satisfaction</td>
<td>.27</td>
<td>.33</td>
</tr>
<tr>
<td>Service Excellence Satisfaction</td>
<td>.63</td>
<td>.11</td>
</tr>
</tbody>
</table>
CHAPTER V
CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

Introduction

Educational institutions across the United States are experiencing budget cuts while also being pressed to increase enrollment. Schools of nursing are also facing similar difficulties with decreased funding and tremendous pressure to increase the number of graduate nurses to fulfill the staggering need for registered nurses now and in the future. To respond to these demands colleges and universities are targeting more diverse and nontraditional students. Schools of nursing are actively recruiting LPN’s to enter accelerated LPN-RN programs. These programs are usually completed in a time frame less than that of a traditional RN course of study. This is accomplished by providing credit to the LPN-RN student for previous course work and then condensing the remaining course requirements; thus, these students are considered accelerated nontraditional students.

Recruiting the LPN-RN student is just the first step in meeting the need for additional registered nurses. Schools of nursing must then retain and graduate these students and to do so it would behoove them to be aware of factors that might impact the students’ success. One method of accomplishing this is to improve student satisfaction since the literature suggests that satisfied students tend to be retained and are more motivated (Astin, 1993; Bean, 1980; Bean & Bradley, 1986; Elliott & Shin, 2002; Heiligenthal, 2005; Karemera et al., 2003; Keup, 2006; Konrad, 2002; Noel-Levitz, 2008a; Pace, 1986; Pike, 1993) and thus, they are more likely to be successful.
Information concerning general nontraditional adult students is widely available but there is a dearth of information relative to the accelerated LPN-RN student. Knowledge concerning what they believe to be important in their academic experiences and their level of satisfaction with those services has not been previously discussed in the literature. In addition, how the accelerated LPN-RN students' success is impacted by satisfaction with academic experiences has not been reported.

This study was designed to identify items of importance and the associated degree of satisfaction with those items that accelerated LPN-RN students place on aspects of their educational experiences. The Noel Levitz Adult Student Priorities Survey™ (ASPS™) was used to analyze the student experiences (Noel-Levitz ASPS; Appendix A). The student experiences were placed in eight subscales identified as academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence. In addition, the study was designed to determine if a correlation existed between student satisfaction ratings of each of the subscales and current nursing course grade point average.

Summary and Discussion of Major Findings

The analysis of the data related reports pertaining to the description of the sample, research questions, and testing the hypothesis was presented in Chapter 4. Based on the findings, and within the limitations of this study a summary and discussion of the results of the research questions and the results of testing the hypothesis follows.
Research Question 1

The results of this study indicated that accelerated LPN-RN students placed factors associated with instructional effectiveness as being most important to them as indicated by a mean of 6.57. Instructional effectiveness was related to course work, curriculum, faculty-student relationships, feelings of being cared for and welcome, and commitment to academic excellence. Nationally, undergraduate adult students in placed a mean rating of 6.47 on items in the instructional effectiveness scale (Noel-Levitz, 2008a).

This finding indicated that the sample of LPN-RN students in this study placed a slightly higher value on instructional factors than did the general population of adult undergraduate students. This finding is similar to other studies that found most aspects directly related to instruction and interaction with instructors as being extremely important to students (Aldemir & Gulcan; 2004; Boylston & Jackson, 2008; Montgomery, 1991; Steele, 2007; Strong, 2005; Womack, 1976). Therefore, the placing of this scale as most important by the LPN-RN students is not surprising since it is composed of factors directly related to the daily activities and responsibilities of being a student.

Given that the instructional effectiveness scale dealt with the day to day classroom activities and requirements needed to be successful in the course, factors comprising the scale could be considered motivators for students. Attending class and acquiring knowledge from the information and dialogue presented in class is intrinsic to the "work" of being a student. Because factors associated with the work itself were considered by Herzberg (1966) to be motivators, it is not surprising that instructional effectiveness is rated high in importance to students. Perhaps the LPN-RN students
placed these motivators somewhat higher than the general adult student population because they already had a keen awareness of the amount of information that must be acquired and understood to be successful in their chosen profession and therefore realized that factors dealing with instructional effectiveness provide the key to their ultimate success. Similar intrinsic factors have also been rated by nursing faculty as being very important in influencing satisfaction (Egenes, 1989). Another possibility for the finding is that the students in the study may have been more motivated than other adult students.

Accelerated LPN-RN students placed items associated with campus climate as second in importance with a mean of 6.52. Among other adult students nationally, campus climate was ranked fourth with a mean of 6.37 (Noel-Levitz, 2008a) which was less than any of the top seven scales in importance to the LPN-RN students. Campus climate addressed items that contributed to a student feeling welcome, valued, respected, and cared for in addition to experiences that impacted the knowledge attained by the student that was directly related to their field of study.

The high rating given to campus climate by the sample was not surprising given that nurses in general are very much attuned and concerned with the “feelings” of themselves and others. The professional obligations and responsibilities of nurses in general require them to be caring and respectful as well as knowledgeable and considerate of factors that might affect the feelings of others; thus, they would likely expect similar considerations from others. This would be especially true when they were paying for a service which in this case is their education.

Issues concerning the registration process, billing and scheduling of classes were addressed in the registration effectiveness scale. The registration effectiveness scale was
rated third by LPN-RN students in this study and was also reported as being rated third among undergraduate adult students in general. The LPN-RN students did place a little higher importance on items in the scale with a mean of 6.51 than did general adult students who scored a mean of 6.38 on items in the scale (Noel-Levitz, 2008a).

Surprisingly, safety and security was an area rated differently by the LPN-RN students when compared to the national report of adult undergraduate students and a previous study of accelerated BSN-RN nursing students (Boylston & Jackson, 2008; Noel-Levitz, 2008a). In contrast however, the high rating of importance was in agreement with both nursing faculty and nursing students in an early study by Egenes (1989). The LPN-RN students ranked the scale as fifth in importance with a mean of 6.45 compared to other adult students nationally who ranked it seventh with a mean of 6.17. Safety and security was also ranked seventh with a mean of 6.14 in a previous study of accelerated BSN-RN students conducted by Boylston and Jackson (2008).

The safety and security scale was composed of areas such as safe classrooms and parking lots as well as areas not usually considered in the safety category such as adequacy of parking. Reasons for the higher ranking among the students in the study when compared to the students in the national report and other nursing students are not known unless perhaps a safety or security concern had been an issue for some of the respondents in the immediate timeframe surrounding the study. Due to the low sample size even if only a few students had recently been concerned with safety or security issues whether at home or school, it could have skewed the results toward a higher mean importance.
Another reason the LPN-RN students may have rated safety and security higher than adult students in general may be because nurses are taught in all levels of their education that patient safety is a priority concern. The concept of providing a safe environment for patients is deeply ingrained into the decisions and actions made by all nurses.

Items making up the service excellence scale primarily addressed the response and timeliness of response to problems and complaints that students had concerning school. The scale also included an item that was related to staff being caring and helpful. This scale was ranked sixth in importance and had a mean rating of 6.43 among the LPN-RN students. It was ranked fifth in importance among adult undergraduate students nationally with a mean of 6.31. Even though it was ranked less with the LPN-RN students, the mean was higher than that of the general adult student population.

Nurses are taught always to place their patients first. Perchance, the LPN-RN students placed the service excellence scale lower overall in importance than other students because it addressed items of concern for the individual student instead of the others as a whole. However, since one item on the scale dealt with feelings of being cared for and helped, it is likely that the LPN-RN students would have rated that specific item as being high in importance; thus impacting the mean importance score.

Academic advising effectiveness was ranked much less by the LPN-RN students than the second place ranking it was given by the adult undergraduate students reported by Noel-Levitz (2008a). The LPN-RN students also rated it less than other accelerated nursing students (Boylston & Jackson, 2008). However, the seventh place ranking by the LPN-RN students had a mean equal to that of adult students in general with both having
means of 6.41. Items compromising the academic effectiveness scale were primarily related to student interaction with counselors when seeking advice related to their course of study. Previous studies among college students also placed it high in importance (Boylston & Jackson, 2008; Strong, 2005). The low ranking by students in the study was not surprising given that the LPN-RN students were already enrolled in and attending the program of study required for them to achieve their current career and educational goals. It is likely that any academic advising they might have needed had long since occurred and that they did not anticipate needing any additional information.

Academic services were placed last in terms of importance by the LPN-RN students and by adult students in general. The LPN-RN students placed a little more importance on these services with a mean of 6.29 than did other undergraduate adult students with a mean of 6.16 (Noel-Levitz, 2008a). Those services consisted of career advising, computer labs, library services, and the bookstore. The low rating was not unexpected since academic services consist of service areas that are extraneous to the actual work or daily responsibilities of being a student. Herzberg (1966) suggested that these factors would contribute only to no dissatisfaction and that they would not impact satisfaction; thus, they would not be as important to the student. Similar findings have been reported in other studies addressing areas students deemed important (Boylston & Jackson, 2008; Steele, 2007).

The LPN-RN students may also have rated the scale lower in importance because they did not feel themselves in need of the services as much as adult students in general. This was particularly likely when addressing items related to career services since they already had a chosen profession and were in school to advance in that same profession.
Other services, such as the computer lab and even the library can now be accessed from home or work via computer and internet and consequently are probably not felt to be as important to the adult student. Also, for the students in the study, they had already taken multiple prerequisite classes, prior to beginning the accelerated nursing program. To be successful in those classes they had to find and utilize methods to meet their library and computer needs at that time; thus, it was not of major importance to them after beginning the LPN-RN program of study.

In must be noted that only a difference of .28 separated the means of the scale identified by the sample as being most important from the means of the scale identified as least important. In and of itself that might be somewhat of a significant finding; however, the difference of the means of the same scales in the national report of the undergraduate adult student population was only .31 (Noel-Levitz, 2008). These findings suggested that all adult students perceive the entirety of their educational experience to be important or maybe that adult students have difficulty differentiating levels of importance on a Likert scale. Perhaps many adult students do not like to answer questions on surveys and they just score all items similarly without reading the statement so that they can finish quickly.

Obviously, there are similarities between the LPN-RN students and the general population of adult undergraduate students’ perceptions concerning items of importance related to satisfaction. However, when comparing data between the two groups it also becomes evident that there are some differences. This is especially true as it relates to factors associated with feelings and interactions with faculty. The LPN-RN students find these factors to be especially important. This finding lends support to Tinto’s (1975,
1988, 1993), Bean’s (1980), and Bean and Metzner’s (1985, 1987) postulates that students have an intrinsic need to feel cared for, appreciated, and respected.

Research Question 2

LPN-RN students in the study indicated the most satisfaction with responses related to the scale identified as instructional effectiveness. The mean of the scale was 6.02 indicating that the sample was highly satisfied with factors such as course work, faculty relations, faculty excellence and commitment to academic excellence. Overall, these students were more satisfied with their academic experience than were adult, undergraduate students in general. The 2008 national study of adult undergraduate students utilizing the ASPS indicated that the mean of their satisfaction rating for instructional effectiveness was 5.68 (Noel-Levitz, 2008a).

Instructional effectiveness was rated first in importance and in satisfaction by the study sample. Consequently, it could be inferred that the perceived academic, intellectual, and relationship needs of students in the sample are being met. Also, internal motivators though not individually identified, must be present for the students given the sample's high level of satisfaction. After all, the presence of motivators, which are intrinsic to the job of being a student and in this case identified by the students themselves as being important should and did result in a high level of satisfaction.

Study findings indicated that safety and security was rated second in satisfaction with a mean of 5.97. This was a higher level of satisfaction for this scale than that reported for adult students nationally. Nationally, safety and security was ranked fifth in satisfaction with a mean of 5.41 (Noel-Levitz, 2008a). On first glance, it is good that students in the sample are satisfied with safety and security issues, but on the other hand,
it would have been better for the students based on their perceived importance of the campus climate scale, if campus climate had been rated second in satisfaction followed by registration effectiveness, admissions and financial aid effectiveness and then safety and security. However, given the scant difference in the mean satisfaction ratings (.04) between the safety and security scale and the campus climate it is really of little significance.

Given the small sample size and the fact that adequate parking was one factor identified within the safety and security scale, it is possible that perceptions related to parking could have skewed the mean. Student parking on both campuses attended by respondents in the study is more than adequate since they attend classes at a time when most other students are not on campus. However, since it is not known if that was the reason for the results it, could be inferred that campus climate perceptions are issues that need to be addressed by the college since they were ranked second in importance to the student but not second in satisfaction.

LPN-RN students were very satisfied with campus climate but rated it third in satisfaction behind safety and security. The mean for the campus climate satisfaction scale was 5.94. Nationally, adult students rated it as second in satisfaction but the mean was 5.55 which was below the mean of this study (Noel-Levitz, 2008a). The difference between perceived importance and satisfaction in this study was .58 which is below the difference of .82 reported of adult students nationally. With these facts in mind the school was doing an adequate job meeting these students’ needs. Even though the students did not rank campus climate satisfaction as high as instructional effectiveness or safety and security, data suggested that students felt they were important, cared for, and valued and
that their voices are heard. On the other hand, since campus climate has been identified as important for the LPN-RN students, it is an area that should be evaluated and enhanced to maintain high levels of satisfaction.

The registration effectiveness scale is another scale in the study where there was a deviation in rankings between importance and satisfaction. Respondents ranked registration effectiveness as third in importance and fourth in satisfaction with a mean satisfaction rating of 5.79. Again, even though aspects of the registration process and business office services were not as satisfying to the students as the importance they had placed upon them they were still highly satisfied and were more satisfied than adult students nationally (Noel-Levitz, 2008a).

At the time of the study, online registration was not available and given the small sample size if this was a concern for even a few students the mean satisfaction results could have been skewed downward. When examining the data it must be noted that the difference between the means of importance and satisfaction with the registration effectiveness scale is small (.71); however, it is greater than differences previously discussed and thus should be addressed by the college.

Survey respondents ranked academic advising effectiveness as fifth in satisfaction with a mean of 5.69 and a standard deviation of 1.17. It was ranked seventh in importance by the study sample. Noel-Levitz (2008a) indicated it was ranked third in satisfaction by adult students nationally and that it had a satisfaction mean of 5.52. These findings indicate that though the LPN-RN students ranked it lower in satisfaction than did adult students nationally they were still exceedingly satisfied with the accessibility and adequacy of academic advice rendered and felt that they received individual attention.
Findings of the study indicated that the standard deviation for academic advising effectiveness was greater than that most of the other scales. This increased variability was likely due to differences in individual perceptions of specific advising encounters. Even so, individual students were still well satisfied with advising services received.

Participants rated the service excellence scale as sixth in both satisfaction and importance. The satisfaction mean for the scale was 5.66 which was better than the mean of 5.29 and the satisfaction ranking of seventh given in the national report of adult students (Noel-Levitz, 2008a). This scale consisted of items that addressed timeliness of response to student inquiries, questions, and concerns as well as one item related to students feeling cared for by staff. Even though the scale was ranked lower in satisfaction than most others, students were still very satisfied.

Admissions and financial aid effectiveness was rated fifth by respondents in level of satisfaction with a mean of 5.57 and a standard deviation of 1.24. The variability was greater with this scale than any of the other scales. Nationally, adult undergraduate students ranked satisfaction with admissions and financial aid effectiveness sixth with a mean of 5.30 (Noel-Levitz, 2008a). Even though satisfaction with the scale was ranked higher in the study than it was nationally, it was still ranked less than what it was ranked in importance to the LPN-RN students; therefore, it is an area that should be addressed. However, even with the variability around the mean, students were still satisfied with the admissions process and financial aid counseling.

The lowest ranked scale based on satisfaction was the academic services effectiveness scale. It was also the lowest ranked satisfaction scale nationally among
adult undergraduate students. The mean of the scale in the study was 5.44 and nationally it was 5.23 (Noel-Levitz, 2008a).

Herzberg (1966) suggested that things extrinsic to the work itself are not satisfiers; that they in fact only contribute to no dissatisfaction. Therefore, the low satisfaction ranking for academic services was not surprising since the scale measured satisfaction with items extraneous to the actual day to day work of being a student. The scale encompassed such services as computer labs, library services, bookstore hours, and career services. Though these services are important to all students, it is probable that the LPN-RN students had found other methods to acquire services needed to assist them in their academic endeavors. In addition, with the availability of computers and the internet most of the services rendered by items making up this scale can be accomplished from home; so again, it does not consist of services that the students consider as important contributors to their satisfaction.

LPN-RN students are similar to adult undergraduate students in general but do have some differences in their level of satisfaction when compared to adult undergraduate students as a whole. Overall, the study suggested that the LPN-RN students were more satisfied than other adult students especially where services connected with instructional effectiveness were concerned. Perhaps this was due to the intrinsic nature of these services and the internal motivation these students possessed. Of course it could also have been due to the students’ innate need to please resulting in their indicating responses on the survey that they perceived the researcher wanted to see or because they went down one column marking responses without any regard to what was being stated. Either way, the results must be taken at face value.
Hypothesis 1

The hypothesis was not accepted. There was no significant relationship between any of the eight scales consisting of academic advising effectiveness, academic services, admissions and financial aid effectiveness, campus climate, instructional effectiveness, registration effectiveness, safety and security, and service excellence related to satisfaction and the current nursing course grade point average.

This finding differs from what has been suggested in the literature. Some previous studies found that student satisfaction had a relationship to motivation and academic goal attainment which would include academic performance (Elliott & Shinn, 2002; Karemera et al., 2003; Keup, 2006; Konrad, 2002; Pike, 1993). The concept of increased satisfaction being related to increased job productivity was conceptualized by Herzberg (1959, 1966) but it was not a great leap to place it in the context of students and their grades as was suggested by Bean (1980), Bean and Bradley (1986), Pace (1986), and Austin (1993). These findings were not supported in this study.

A possible contributing factor to the results was that of the small range of grades among participants in the study. The minimum course grade point average for the participants was a 75 and the maximum was a 98. The mean was 86.43 and the standard deviation was 4.97 so most of the participants had better than average grades. It was noted at the time of the study that students with the lowest GPA's chose not to participate. No reasons were provided for their choosing not to participate. Perhaps it was because since their grades were low that they perceived the study to offer no individual benefits or maybe since they had poor grades they just had no interest in participating. It is possible that this group just did not like to participate in research studies. Whatever the
reason, it is feasible that the poor participation of those with low grades and the small sample contributed to the finding.

Ancillary Findings

An unexpected finding associated with the study was related to the negative correlation of admissions and financial aid effectiveness satisfaction to GPA. The standardized coefficient was -.63 with a standard of error of .12. Though not significant, the finding was intriguing.

One possible explanation for the finding might be that students that were most satisfied with the process of getting admitted into the program of study were students that had initial concerns about meeting admission requirements due to low previous course GPA's or low testing scores. For these students, just the fact that they were admitted into the course might have positively impacted their satisfaction perception. However, students with a previous history of testing difficulties and low grades are often the students that are not retained or successful (Allen et al., 1988; Campbell & Dickson, 1996; Jeffreys, 2007; McCarey et al., 2007; Wong & Wong, 1999). In addition it is not uncommon for these students to continue to struggle with testing and ultimately grades.

Satisfaction with financial aid services was likely positively affected by those who received financial aid. Perhaps the students were just happy to get some financial resources to ease their debt load while they were in college; however, their financial need was so great that they had to continue to work at least part time to meet their monetary needs which negatively affected their GPA. The literature suggests that students with financial issues tend to not perform as well in school as those without such issues (Aber & Arathuzik, 1996).
The slight negative correlation between instructional effectiveness satisfaction and GPA (Standardized Coefficient -0.53, Std. Error, .23) was also an unexpected finding even though it was not statistically significant. The scale consisted of items related to caring and faculty interactions as well as academic standards and perceived value of instruction. Conceivably, students may have felt they were treated fairly and cared for by faculty and since LPN-RN students' value caring and since they feel that they are welcomed by their instructors their perceptions of satisfaction could be inflated.

Findings also indicated a slight positive correlation between service excellence satisfaction and GPA. Though this finding was not significant, it was also not surprising. Items on the scale addressed such areas as making students feel welcome and cared for, and timeliness of responses to questions and complaints. Perchance, the most academically able LPN-RN students were also the ones that were in need of responses to questions. Also, since these students received timely, adequate answers to questions they may have perceived those interactions as caring thus leaving them with a sense of satisfaction.

Conclusions and Recommendations

Conclusions

As emphasized in the introduction of this study the immediate need for registered nurses continues to proliferate. In response, colleges and universities are increasing the number of nontraditional students including accelerated LPN-RN students they are recruiting and enrolling. This student population has not been studied related to what educational services they perceive as important and their levels of satisfaction related to
those services. Nor have studies been conducted on how the LPN-RN student satisfaction correlates to GPA.

This research examined the importance of certain service areas utilized in the education setting by LPN-RN students and how satisfied students were with the services. In addition, it examined if significant relationships existed between the service area scales and student GPA.

The review of literature discussed satisfaction and its impact on motivation and success. Herzberg et al. (1959) and Herzberg (1966) suggested that the presence of hygiene factors or extrinsic factors would prevent an individual from being dissatisfied but those factors if present would not increase satisfaction and therefore motivation. Other literature suggested that satisfied students tended to be more successful. Herzberg et al. (1959) and Herzberg (1966) also postulated that the presence of factors that are intrinsic to the "work itself" tended to increase productivity, and motivation. These suggestions were also reinforced in the literature.

The LPN-RN students indicated that intrinsic factors were most important to them. Even though some might suggest that interpersonal relationships resulting in feelings of being cared for are extrinsic factors; in the role of a student they are a part of the every day student experience and are essentially what the student does. Other aspects of the "work" of being a student that were identified as being most important were timely feedback, high expectations, and fair treatment.

Based on the literature review it would be expected that since students were most satisfied with the intrinsic motivators that increased GPA would have resulted, however, it did not. In fact there was a slight negative correlation. Thus, previous findings in the
literature that indicated increased satisfaction resulted in increased grades were not upheld, at least for this sample of accelerated LPN-RN students.

Recommendations

Based on the review of literature and findings of this study, the following policy, practice and research recommendations are presented.

Recommendations for policy. Colleges, universities and schools of nursing should consider the differences in individual student populations even if the differences are small. Institutions of higher learning should develop and continuously review and revise strategic plans for evaluation that include student needs assessments and satisfaction surveys. Needs assessments and satisfaction surveys should be closely scrutinized for changes and areas needing improvement. Part of the strategic plan should include development of techniques and strategies to improve student perceptions related to participating in surveys. The plan may help identify learner needs and issues so that those areas can be targeted as needed.

Educational institutions should develop programs that are accessible to faculty that address results of needs assessments and satisfaction surveys. In addition they should seek faculty feedback concerning methods to meet student needs and improve student satisfaction. They should also seek faculty input on when surveys are best administered.

Institutions of higher learning should incorporate into their academic calendars opportunities for students and faculty to interact on a one to one basis or at least in a setting outside the classroom.

Educational institutions should provide continuing education designed to assist faculty and staff with specific practices to increase student satisfaction.
**Recommendations for practice.** Faculty at institutions of higher learning should strive to become increasingly aware of their students needs and collaborate to determine how to best meet those needs. Faculty should incorporate concern with meeting student needs into all aspects of the educational process. They should also be aware that if they are teaching LPN-RN students that they should endeavor to make the student feel welcome and cared for.

Faculty should also work to provide learning activities for students that promote academic excellence and maintain achievable expectations that are above average, not just the minimum.

Faculty should strive to "get to know" their students with the intent to better meet student needs. To do this, faculty should plan times to interact with students individually or in small groups that would facilitate one on one conversation and interaction. They should also provide contact information (email address or telephone number) to students so that faculty are readily available to meet student needs.

Faculty should provide methods for students to interact with each other and develop relationships by encouraging students to work together in small study groups and encourage them to exchange contact information so that they have peer support available when needed. In addition, faculty could establish online discussion groups for students and faculty to interact and discuss items of concern or interest.

**Recommendations for research.** Further research should continue to explore items of importance to accelerated LPN-RN students. In particular, research should investigate the importance of specific services and educational experiences students encounter
regularly. Research should also explore student satisfaction with each of the services and experiences.

Additional research should be conducted on variables that contribute to improved student success and retention. This study should also be replicated with a larger sample to include students with low GPA’s. The study would also likely benefit from a qualitative component that would include questions related to student perceptions.
Dear Student,

Your institution is interested in systematically listening to its students. Therefore, your thoughtful and candid responses to this survey are very important.

You are part of a sample of students carefully selected to share feedback about your experiences with this institution thus far. Your responses will give your campus leadership insights about the aspects of college that are important to you as well as how satisfied you are with them.

Thank you for your participation.

Instructions:
- Use a No. 2 pencil only. Please do not use ink or ballpoint pen.
- For each response, darken completely the corresponding oval.
- Erase completely any change in your answer.
- Do not make stray marks.

Each item below describes an expectation about your experiences with this institution. On the left, tell us how important it is for your institution to meet this expectation. On the right, tell us how satisfied you are that your institution has met this expectation.

<table>
<thead>
<tr>
<th>Importance to me</th>
<th>My level of satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adult students are made to feel welcome at this institution.</td>
<td></td>
</tr>
<tr>
<td>2. Faculty care about me as an individual.</td>
<td></td>
</tr>
<tr>
<td>3. Classes are scheduled at times that are convenient for me.</td>
<td></td>
</tr>
<tr>
<td>4. The content of the courses within my major is valuable.</td>
<td></td>
</tr>
<tr>
<td>5. Classroom locations are safe and secure for all students.</td>
<td></td>
</tr>
<tr>
<td>6. Financial aid counselors are helpful to adult students.</td>
<td></td>
</tr>
<tr>
<td>7. The staff at this institution are caring and helpful.</td>
<td></td>
</tr>
<tr>
<td>8. My academic advisor is available at times that are convenient for me.</td>
<td></td>
</tr>
<tr>
<td>9. Billing policies are reasonable for adult students.</td>
<td></td>
</tr>
<tr>
<td>10. Admissions representatives are knowledgeable.</td>
<td></td>
</tr>
<tr>
<td>11. My academic advisor is concerned about my success as an individual.</td>
<td></td>
</tr>
<tr>
<td>12. Computer labs are adequate and accessible for adult students.</td>
<td></td>
</tr>
<tr>
<td>Importance to me</td>
<td>My level of satisfaction</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>13. The amount of student parking is adequate.</td>
<td>15. Library resources and services are adequate for adults.</td>
</tr>
<tr>
<td>14. Faculty are fair and unbiased in their treatment of individual students.</td>
<td>16. I am able to register for classes I need with few conflicts.</td>
</tr>
<tr>
<td>17. Business office hours are convenient for adult students.</td>
<td>18. Registration processes are reasonable and convenient for adults.</td>
</tr>
<tr>
<td>19. My academic advisor is knowledgeable about requirements in my major.</td>
<td>20. Admissions representatives respond to adult students' unique needs.</td>
</tr>
<tr>
<td>21. Tuition paid is a worthwhile investment.</td>
<td>22. Faculty provide timely feedback about my progress.</td>
</tr>
<tr>
<td>23. Adequate financial aid is available for most adult students.</td>
<td>24. This institution has a good reputation within the community.</td>
</tr>
<tr>
<td>25. This institution provides opportunities to improve my technology skills.</td>
<td>26. Adequate financial aid is available for most adult students.</td>
</tr>
<tr>
<td>29. I seldom get the &quot;run-around&quot; when seeking information at this institution.</td>
<td>30. Academic support services adequately meet the needs of adult students.</td>
</tr>
<tr>
<td>31. I am able to register by personal computer, fax, or telephone.</td>
<td>32. My advisor helps me apply my academic major to specific career goals.</td>
</tr>
<tr>
<td>33. Channels are readily available for adult students to express complaints.</td>
<td>34. Nearly all faculty are knowledgeable in their field.</td>
</tr>
<tr>
<td>35. I receive complete information about the availability of financial aid.</td>
<td>36. The institution offers a variety of payment plans for adult students.</td>
</tr>
<tr>
<td>37. Part-time faculty are competent as instructors.</td>
<td>38. When students enroll at this institution, they develop a plan to complete their degree.</td>
</tr>
<tr>
<td>39. Career services are adequate and accessible for adult students.</td>
<td>40. I am able to complete most of my enrollment tasks in one location.</td>
</tr>
<tr>
<td>41. Major requirements are clear and reasonable.</td>
<td>42. This institution provides timely responses to student complaints.</td>
</tr>
<tr>
<td>43. This institution offers a variety of payment plans for adult students.</td>
<td>44. Bookstore hours are convenient for adult students.</td>
</tr>
<tr>
<td>45. Faculty are usually accessible for adult students.</td>
<td>46. I am aware of whom to contact for questions about programs and services.</td>
</tr>
<tr>
<td>47. There are sufficient options within my program of study.</td>
<td>48. My academic advisor is accessible by telephone and e-mail.</td>
</tr>
<tr>
<td>49. My academic advisor is knowledgeable about requirements in my major.</td>
<td>50. My program provides opportunities to improve my technology skills.</td>
</tr>
</tbody>
</table>
Your institution may choose to provide you with additional questions on a separate sheet. This section below numbered 51-70 is provided as a response area for those additional questions. Continue on to item 71 when you have completed this section.

Choose the one response that best applies to you and darken the corresponding oval for each of the questions below.

80. So far, how has your college experience met your expectations?
- Much worse than I expected
- Quite a bit worse than I expected
- Worse than I expected
- About what I expected
- Better than I expected
- Quite a bit better than I expected
- Much better than I expected

81. Rate your overall satisfaction with your experience here thus far.
- Very satisfied
- Satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Dissatisfied
- Not satisfied at all

82. All in all, if you had it to do over, would you enroll here?
- Definitely yes
- Probably yes
- Maybe yes
- Maybe not
- Probably not
- Definitely not
Choose the one response that best describes you and darken the corresponding oval for each of the items below:

### Gender:
- Female
- Male

### Age:
- 24 and under
- 25 to 34
- 35 to 44
- 45 and over

### Ethnicity/Race:
- African-American
- American Indian or Alaskan Native
- Asian or Pacific Islander
- Caucasian/White
- Hispanic
- Other
- Prefer not to respond

### Current Enrollment Status:
- Day
- Evening
- Weekend

### Current Class Load:
- Full-time
- Part-time

### Class Level:
- First year
- Second year
- Third year
- Fourth year
- Special student
- Graduate/professional
- Other

### Current GPA:
- No credits earned/not applicable
- 1.99 or below
- 2.0 - 2.49
- 2.5 - 2.99
- 3.0 - 3.49
- 3.5 or above

### Educational Goal:
- Associate degree
- Vocational/technical program
- Transfer to another institution
- Bachelor's degree
- Master's degree
- Doctorate or professional degree
- Certification (initial or renewal)
- Self-improvement/pleasure
- Job-related training
- Other

### Employment:
- Full-time off campus
- Part-time off campus
- Full-time on campus
- Part-time on campus
- Not employed

### Current Residence:
- Own house
- Rent room/apartment/house
- Relative’s house
- Other

### Residence Classification:
- In-state
- Out-of-state
- International (not U.S. citizen)

### Marital Status:
- Single
- Single with children
- Married
- Married with children
- Prefer not to respond

### When I entered this institution, it was my:
- 1st choice
- 2nd choice
- 3rd or lower

### Major/Program:
- Fill in major/program code from list provided by your institution:

Your numeric identifier is requested for research purposes and will not appear on any report.

Your response is voluntary.

Student ID/SSN if requested by your institution:

Write the requested number in the spaces of the box provided.

Completely darken the corresponding oval.

Thank you for taking the time to complete this survey.

Please do not fold.
APPENDIX B

HUMAN SUBJECTS REVIEW FORM

UNIVERSITY OF SOUTHERN MISSISSIPPI
(SUBMIT THIS FORM IN DUPLICATE)

Name: Kathy Dianna French Batton
E-Mail Address: kbatton@hughes.net or kdbatton@hindscc.edu
Mailing Address: 3610 Bill Downing Road, Raymond MS 39154
College/Division: Edu & Psych / Ed, Leadership & Research
Department Box #: 5027

Proposed Project Dates: From Jan. 12, 2009 To May 15, 2009
Title: Adult Student Satisfaction in an Accelerated LPN-RN Nursing Program

Funding Agencies or Research Sponsors: NONE
Grant Number (when applicable): NIA

New Project
Dissertation or Thesis
Renewal or Continuation: Protocol #
Change in Previously Approved Project: Protocol #

Principal Investigator: Kathy Batton
Advisor: Thomas V. C. Babin
Department Chair

RECOMMENDATION OF HSPRC MEMBER

Category I. Exempt under Subpart A, Section 46.101 ( ), 45CFR46.
Category II. Expedited Review, Subpart A, Section 46.110 and Subparagraph ( ).
Category III. Full Committee Review.

HSPRC College/Division Member
HSPRC Chair
APPENDIX C

IRB APPROVAL

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board

HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE
NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 29020306
PROJECT TITLE: Adult Student Satisfaction in an Accelerated LPN-RN Nursing Program
PROPOSED PROJECT DATES: 01/12/09 to 05/15/09
PROJECT TYPE: Dissertation or Thesis
PRINCIPAL INVESTIGATORS: Kathy D. French Batton
COLLEGE/DIVISION: College of Education & Psychology
DEPARTMENT: Educational Leadership & Research
FUNDING AGENCY: N/A
HSPRC COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 02/03/09 to 02/02/10

Lawrence A. Hosman, Ph.D.
HSPRC Chair

Date
Memo

To: Dr. Clyde Muse  
   President  
From: Libby Mahaffey, PhD, RN  
   Dean, Nursing and Allied Health  
Re: Kathy Batton Research  
Date: December 2, 2008  

Kathy Batton is requesting permission to conduct her dissertation research at the College. Kathy will work with Debra Spring and the program directors for the research implementation.

I am serving on Kathy's dissertation committee and look forward to the results of the study. I believe these results will provide information that the associate degree nursing program can use to impact retention and student satisfaction.

Approved  
12/2/08  
CM
APPENDIX E

COVER LETTER

Adult Student Satisfaction in an Accelerated LPN-RN Nursing Program

Purpose: As accelerated LPN-RN students you are being asked to participate in a study designed to examine items of importance to you as a student and how satisfied you are with the specified items. In addition, the study will seek to determine if there is a correlation between satisfaction with the specified items and success as measured by current nursing course grade point average. Information gleaned from the study may be of assistance in improving student satisfaction and student success. This study is being conducted by Kathy Batton, a doctoral student under the direction of W. Pierce EdD. at the University of Southern Mississippi.

Description of Study: As a participant, you are being asked to complete a survey focusing on specific areas of importance to students and how satisfied you are with each of these items. The study will then examine the correlation between how satisfied you are with your current nursing course grade point average. It should take about 30 minutes to complete the questionnaire. Participants may obtain overall results of the study upon study completion by contacting the researcher via email by using the provided contact information.

Benefits: You will likely receive no direct benefit from participation in the study other than those that might be perceived. It is possible that larger, unidentifiable benefits may be gained. Your responses may help nursing educators improve student satisfaction and student success in the future.

Risks: There are no known risks associated with participation in this study other than those that might be perceived. Confidentiality will be maintained at all times and survey instruments will be kept in a locked, secure location. Information will be reported in aggregate form so that no one individual can be identified.

Confidentiality: All completed questionnaires will be maintained in a locked cabinet in a secure area until mailed to the Noel-Levitz Company. Only aggregate information will be analyzed and reported by the Noel-Levitz Company. When the questionnaires are returned to the researcher they will be kept in a locked cabinet in a secure area. Individual data will be analyzed by linking the student identification number on each questionnaire with recorded grades for that student identification number, no student names or social security numbers will be used. At the completion of the study all survey instruments will be shredded. All individual information gained from the study will be kept confidential, seen by no one other than the researcher and the statistician.

Subjects Assurance: Participation in this study is voluntary. You may refuse to participate at any time without penalty. Refusing to participate will not in any way affect your standing as a student. If you have any questions about the study you may contact the researcher, Kathy Batton, at 601 857 5330 or Kbatton@ Hughes.net. Overall results of the study will be available to you after July 30, 2009 upon request.

This project has been reviewed and approved by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, Box 5147, Hattiesburg, MS 39406, 601 266 6820. Participation in this study is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits.

Signature of Person Giving Oral Presentation   Date
APPENDIX F

AUTHORIZATION TO PARTICIPATE

AUTHORIZATION TO PARTICPATE IN RESEARCH PROJECT
(Short Form – to be used with oral presentation)

Participant’s Name ________________________________

Consent is hereby given to participate in the research project entitled Adult Student Satisfaction in an Accelerated LPN_RN Nursing Program. All procedures and/or investigations to be followed and their purpose, including any experimental procedures, were explained by ____________________. Information was given about all benefits, risks, inconveniences, or discomforts that might be expected.

The opportunity to ask questions regarding the research and procedures was given. Participation in the project is completely voluntary, and participants may withdraw at any time without penalty, prejudice, or loss of benefits. All personal information is strictly confidential, and no names will be disclosed. Any new information that develops during the project will be provided if that information may affect the willingness to continue participation in the project.

Questions concerning the research, at any time during or after the project, should be directed to Kathy Batton at 601 857 5330.

This project has been reviewed and approved by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, Box 5147, Hattiesburg, MS 39406, 601 266 6820. Participation in this study is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits.

A copy of this form will be given to the participant.

_________________________________  ________________________
Signature of participant                  Date
REFERENCES


