Input and Environmental Characteristics in Student Success: First-Term GPA and Predicting Retention at an Historically Black University.

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INPUT AND ENVIRONMENTAL CHARACTERISTICS IN STUDENT SUCCESS: FIRST-TERM GPA AND PREDICTING RETENTION AT AN HISTORICALLY BLACK UNIVERSITY

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in

The Department of Educational Leadership, Research, and Counseling

by

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B.S., Southern University Baton Rouge, 1987
M.P.A., Southern University Baton Rouge, 1991
December 2000
DEDICATION

I would like to dedicate this dissertation and my academic career to my family for their guidance, love, and prayers. Hosanna in the highest for His guidance and protection over me at all times. A popular African adage says, It takes a village to educate an African child. I am a beneficiary of this African way of life.

To my parents, Mr. James O. Babaoye and Mrs. Olatohun J. Babaoye.

I say thank you once again.

You stood by me in spirit and with your never ending prayers.

I will forever cherish you both.

I hope that I have lived up to your good names and represented you well. Above all, I dedicate this document to all my brothers and sisters: Omowumi, Olabode, Iyabode, Abiola, Mopelola, Olaitan, and their families as well as our children. This is a challenge to you, Oluwasheyi, Boladale, and Kolawole.

Finally, permit me to quote a section of the Bible which I firmly believe in.

(Psalm 23:1: The Lord is my shepherd; and I shall not want.)
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Since primary school, I have always had a yearning for education although my parents did not have any formal education themselves. As a matter of fact, no one in my mother’s household has ever seen the four walls of a classroom in a practical sense. My father learned enough at evening classes taken in Lagos to help him in his trade. He made sure that he had enough training to enable him to exchange pleasantries and count money when he met with trading partners on his ferry trade along the coast of Lagos, Nigeria. Because of the seemingly blossoming trade, he was eager to see me through primary school so that I could join him in his flourishing business. On the other hand, my mother wanted me to have an education beyond high school. Usually, in the African tradition, the father wins on important issues such as this one, but somehow my mother was able to prevail over him. I was told she simply said to Baba (Father) that a college education would make Sunday, as I was commonly
called in the family, a better tradesman. She saw within me the need to explore my intelligence capacity beyond high school. Of course, they both knew my abilities very well because I was always among the top in my class (1st to 3rd) in a class of 30 to 60 students. Thus, I began my quest, an insatiable and unquenchable thirst for knowledge. The same circumstance has led me to my newfound home and sojourn in the United States.

My pursuit of knowledge has given me experiences of real life over a sixteen year span. I met people and began to know life in the real sense of the word. This search also galvanized the desire in me to pursue the ultimate in education—a Ph.D. In the process of obtaining the doctoral degree, I met very wonderful people, kind, dignified and honorable human beings. These individuals have helped shaped my thinking, orientation, and philosophy in addition to the values acquired from my parents. This has aided me in choosing a career for the rest of my life. These individuals who have had a profound effect on my life and development are duly recognized below.

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ABSTRACT

This study is aimed at determining the input and environmental factors which contribute to the academic success or failure of students at an historically black institution. A university established for "persons of color" as a public, metropolitan, and open admission institution was the setting for the study.

Three files were merged with first-time and transfer freshmen characteristics to serve as a basis for the quantitative analyses. On the qualitative front, a case study of college life at Southern University, Baton Rouge was performed. Data were collected from interviews with students, recent graduates, and University personnel. Additionally, the case study involve analyses of institutional records between 1993-1997.

The quantitative data analyses revealed that ACT scores, gender, enrollment status, age, and housing arrangement significantly influenced academic success, while ethnicity and the residence of students did not. There was a negative correlation between students' age and ACT, ethnicity, housing, enrollment, and admission status as well as between GPA and students' gender, while first-term GPA and ACT scores were positively related to retention and graduation. Findings from the qualitative study confirmed some of this.

Overall, the quantitative results of the study clearly showed that the first year of college may be critical to the success of students in terms of their GPA, persistence behavior, and attainment of a degree. Perhaps the most striking finding from this study was that the University was effective in retaining its students. The approach
used in the prediction also indicated weaknesses inherent in the use of raw count or
averages for determining retention rates. On the other hand, in the qualitative study,
self-determination, interaction with the faculty, and family support were found to be
central to the success of the students. Also suggested was that the achievement of the
students may depend on their preparation, gender, living on campus, and other
variables revealed in the quantitative study. Additionally, qualitative study indicated
that the level of integration of students into the University community and a caring
and nurturing environment contributed to their success. Use of these complementary
methods provided better insight into understanding the complexities surrounding
student life on college campuses today, particularly that of African Americans at an
historically black institution.
CHAPTER 1

INTRODUCTION

Since the 1960s, the proportion of minority students enrolled in U.S. colleges (for this study, colleges in the 50 United States) has increased. In 1976, for example, 16 percent of enrolled students were minorities compared to 25 percent in 1995. Much of the change is attributed to rising numbers of Hispanics and Asian students. For instance, the proportion of Asian and Pacific Islander students rose from 2 to 6 percent; Hispanic enrollment rose from 4 to 8 percent during that time, while those of African American students fluctuated over the previous 19 years between 9.3 and 10.5 percent until rising to 11 percent in 1995 (Snyder, Hoffman, & Geddes, 1997). Overall, higher education enrollment increased by 9 percent between 1975 and 1985, but between 1985 and 1995, it increased at a faster rate of 16 percent, resulting in the jump from 12.2 million to 14.3 million.

One other important characteristic of higher education enrollment patterns in the U.S. relates to historically black colleges and universities (HBCUs), where in all, enrollment rose by 26 percent between 1976 and 1994. This marked increase in enrollment at HBCUs, which occurred for the most part between 1986 and 1994 when it rose by 25 percent, signaled an important trend in African American student enrollment (Hoffman, Snyder, & Sonnenberg, 1996). Perhaps this was a period of African American student flight from traditionally white institutions (TWIs) to HBCUs where these students hoped to escape the isolation or sense of alienation that

The question of alienation in college life will have special relevance later in this study when, using qualitative methods to uncover information not usually forthcoming in quantitative studies, the role of campus environments on the academic performance of students will be examined (Astin, 1991; Kuh, 1981; Patton, 1990; Tashakkori & Teddlie, 1998; Tinto, 1993).

The Utility of Education

The aforementioned facts constitute significant trends because they demonstrate social and political changes and, more importantly, because higher education has a great influence on the economic well-being of the nation and its citizens. Often, the levels of education determine the nature of social stratifications in society and where on the social ladder a family may be. Furthermore, usually a student’s performance and success in college will significantly impact the job opportunities available to the student (Nettles, 1988; Terenzini & Pascarella, 1991; Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996; Tinto, 1993).

Education as a useful means of raising one’s standard of living or economic status in American society is an idea shared by the great majority of college freshmen.
This view is supported by the findings of a recent survey which sought to determine why students thought it important to go to college. The survey polled 252,082 freshmen entering 464 two-year and four-year institutions in the Fall of 1997. Nearly 75 percent (74.6) of the students said that their reason for wanting to go to college was to be able to get better jobs. While 74.3 percent of the students stated that the aim of a college education was to learn more about things that interested them, 73 percent felt that college education existed to help graduates make more money (Chronicle, August 28, 1998).

Research has established that there is a relationship between income earnings and educational attainment. For instance, the average income of college graduates is significantly higher than the income of non-college graduates. A recent report, “Current Population Survey, Educational Attainment in the United States,” shows that more education means more take-home pay and reduced chances of unemployment. Earnings go up progressively with each additional year of school completed. As an illustration, the average earnings in 1996 by an associate degree holder, age 18 years and above, were $25,181. The college graduates in the same age group made $38,112 per annum, a difference of a little over 51 percent. An even greater increase occurred when the earnings of those with advanced degrees, paid an average income of $61,317, were compared to the earnings of bachelor’s degree holders. A nearly 61 percent difference in earnings was recorded. This situation held true not only for the entire population, but also across each subgroup defined by demographic factors such as gender, race, occupation, age, and work experience.
Additional information contained in this report indicated that among racial categories in the United States, Asians had the highest educational attainment. The college completion rates by race for ages 25 and over were clear evidence of this situation. Asians had the highest with 42.2 percent holding a bachelor's degree or higher, compared with 24.6 percent for Caucasians and 13.3 percent for African Americans (U.S. Bureau of the Census, 1997).

College Attendance among African American Students

The major reason offered for the low salary earnings and job status among African Americans when compared to other groups, particularly those of Caucasian ancestry, was the difference in educational levels among the groups. It has been well documented that African Americans are more likely to leave college without completing their degrees, have a lower persistence rate, have lower score on standardized tests, drop out of school more frequently, and take longer to graduate than Caucasians (AASCU, 1997; Astin, 1996; Smith, 1995; Tinto, 1993). A national retention project by Sallie Mae Student Loan Marketing Association (AASCU, 1997), examined the important issue of retention with the aim of finding answers as to how best to retain students until graduation. It is, therefore, not surprising that several research studies and policy debates have focused on retention with great interest.

In this regard, Vincent Tinto (1993) a notable scholar and author, noted the following: "Little wonder, then, that institutions have come to view the retention of students as the only reasonable course of action left to ensure their survival, and that a growing number have turned their energies in that direction with a renewed passion"
There is no single answer to the question of how to produce a quality student who stays in school and graduates; however, the recent focus on retention is part of an increased demand by stakeholders for more accountability in higher education. Thus it is a call for more assessment and performance evaluation, both institutional and student-oriented. This call for long-term accountability is based on the beliefs that the mission of higher education is too diverse to measure and that short-term measurement will not provide adequate insight into long-term student scholarship success (Gaither, Nedwek, & Neal, 1994).

Consequently, there is mounting interest in determining the factors, especially persistence behavior and associated factors, which influence college performance. This leads to the notion of educationally purposeful goals in institutions of higher learning (Kuh, 1996). The focus, then, is on undergraduate activities, events, and experiences that are congruent with the educational purposes of institutions and a student's own educational aspirations. The institution, through its roles, scope, and objectives, attempts to produce a quality product in the form of students who finish school and are well equipped to make meaningful contributions to society.

If it is important to study performance outcomes, then it is also important to determine the factors which foster student development and contribute to students' success in college. We must find those variables that make college experience a rewarding and worthwhile enterprise so that students can build their life-long career choices and live fulfilling and successful lives. To this end, we must determine the role of student transition from high school to college and a wide variety of in- and
out-of-class factors including place of residence while in college, interaction with faculty and peers, institutional characteristics, socioeconomic factors, aesthetics, self-esteem, motivation or attitude toward education, self-concept, quality of effort, aspiration, and a host of other factors (Allen, 1992; Astin, 1996; Boyer, 1987; Davis & Nettles, 1987; Nettles, Thoeny, & Gosman, 1984; Pace, 1980; Smith & Allen, 1984; Terenzini, Pascarella, & Blimling, 1996; Volkwein & Cabrera, 1998).

On this basis, researchers are attempting to predict and/or establish relationships among factors which have either positive or negative effects on the academic efforts of students. This is pursued in the hope that appropriate responses can be formulated to help students once the problems are known. Succinctly stated, this investigation was an attempt to contribute to the existing body of knowledge on how to make the college experience a successful one, specifically for African American students who matriculate at Southern University, an historically black institution. Furthermore, it was aimed at providing additional answers to the complex question of studying student experiences in college. Likewise, the changing demographics provide impetus for periodic re-examination of the factors that influence student performance and success.

Conceptual Framework

There have been several theories put forth by scholars who studied college students and their development. Among these scholars was Tinto (1975, 1987, 1993), who acknowledges personal characteristics and integration of college students in their new environment as important factors to their success. Padilla, Trevino, Gonzalez,
and Trevino (1997), for example, suggested utilizing heuristic models which minority students employ to overcome barriers to their academic success. Astin (1977, 1991, 1993b, 1997), however, proposed the assessment of college students by using an input-environment-outcome (I-E-O) model. Although the numerous conceptualizations found on college students during my literature review, whether cited or not in this study, make contributions to the study of students, I have found Astin's work most appealing because it is simple and takes into consideration the students’ characteristics in the determination of their educational development and performance. Specifically, he employed this same approach in his study used to predict retention and graduation at universities in the United States taking into consideration student and institutional differences as well as the extent of the data available at the institution, and of course, input and environmental variables that could be utilized in such studies (Astin, Tsui, & Avalos, 1996; Astin, 1997). Above all, this model supports the application of the quantitative and qualitative approaches in evaluation investigations. Surprisingly, during my review, no single study applied this model to the understanding of African American students at an historically black university. By utilizing this model as adopted by House (1998), it is hoped this will encourage a systematic approach to the understanding of African American students, development processes, their achievement, and HBCUs in the educational arena.

In his model, Astin (1977, 1991, 1993b) developed a simple yet powerful concept for conducting assessment activities in higher education. The model is capable of dealing with the complex and difficult task of understanding students as
well as assessing and evaluating the institutions they attend, noting the characteristics
associated with the student and the institution (input) with the end product (outcome)
in mind. According to Astin, when this kind of investigation is embarked upon from
these angles, the effectiveness and productivity of the students vis-a-vis the institutions
they attend--of which there are more than four thousand in the United States--can be
known and improved. He pointed out that "output must always be evaluated in terms
of inputs" (p. 17). In like manner, the environment is very important for a thorough
understanding of the students' educational processes. Consequently, the two (input
and outcome) by themselves cannot be of much use without knowing the educational
environment of the students, which also affects their experiences in college in the
form of courses, programs, facilities, faculty, and peer groups with which they

Thus, Astin (1991) defined inputs as personal qualities that the student brings
to college at the start of the college education, while environment referred to the
student's experiences during college life. These two elements were regarded as types
of independent variables or exogenous variables. On the other hand, the outcome
variables were considered as dependent, endogenous, or criterion variables. The
model showed a triangular shape with three isolated blocks of constructs joined by
arrows to demonstrate the interconnectedness of the process. This conceptual
framework was illustrated with three sets of constructs in Figure 1.1, which showed
the connectedness of the three variables (A, B, C), with arrows showing the direction.
Astin posited, on the basis of this model, that students' input can relate to both

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outcome (arrow C) and environment (arrow A). In another way, differences among students are usually consistent and correlated in time (arrow C). In another vein, different kinds of students with their own unique qualities select different kinds of educational settings or environments (arrow B). On this premise, it could be surmised that inputs are related to both outputs and environments. This implies that inputs can, in turn, affect studied relationships between environments and the outcome.

Figure 1.1: The I-E-O Framework

Avalos (1996, pp. 42-43) presented the expanded version of Astin's I-E-O model (see Figure 1.2) which included what he called "intermediate outcomes" (p. 43) located between the environment and the intended outcome variable. Intermediate variables may be considered as outcomes by themselves. The intermediate outcome may include variables such as student involvement measures and, in this case, retention. Because time to degree differs among college students, this may also be recognized as an intermediate outcome in some instances. In addition, stopping out before graduating, changing institutions before earning a degree, and leaving college are all considered to be intermediate outcomes.
The model used in the study was based on a group of Fall 1993 students. The variables employed in the study were derived from those used in many of the recent conceptualizations of college student performance in related literatures. The I-E-O model adopted in this study hypothesizes selected areas that may influence student performance either independently or through interaction effects. The variables included in this study also describe common attributes of the students. In essence, the students are homogenous as grouped in their composition, social integration with faculty and fellow students, campus environment, financial aid, advising, course patterns, etc.

Specifically, the study encompasses student ACT scores, gender, enrollment status, housing, age, race, residence, and admission status as the independent variables while utilizing end of Fall 1993 semester grade point average (GPA) as the dependent variable presumed to be an indicator of performance. Similarly, the interplay (interaction) effect of these variables may indirectly affect how well the student performs at the end of the semester as reflected by the GPA. This model is by no means exhaustive of the variables that may predict the academic performance of college students. Those variables used depend upon the objective, the scope, and the nature of the investigation being carried out. Therefore, only eight independent variables were utilized in the study. In total, nine variables were employed in the study when we include the first-term GPA, the dependent variable. Saupe, Smith, and Xin (1999) performed a similar study which utilized freshmen GPA and eight additional variables.
On the basis of the review of literature, it becomes apparent that studying students, the young adults and potential labor force on which the country will rely after their graduation, could be done under one umbrella. Although studying students in higher education is a complex enterprise, Astin (1991, 1993b) has categorized it under the so-called Input, Environment, and Outcome (I-E-O) model (see Figure 1.1). Kuh (1981, p.10) described the model as:

Perhaps the most popular multidimensional approach to assessing quality. Input represents what students bring with them to college (ability, interests, etc.); outcomes are measures of cognitive and affective changes associated with college attendance; and environment includes both interactions between students and others (faculty, peers, etc.) and actual institutional resources such as library holdings, expenditures per student, and so forth.

Embedded within this rather simple model are cognitive and noncognitive factors and the issue of retention that Bohr, Pascarella, Nora, and Terenzini (1995) identify as positively linked both directly and indirectly to African American students’ attendance and degree completion at an historically black institution. What appears as a simple identification of the circumstances surrounding student experiences is a combination of cognitive and noncognitive influences that shape student life in college. These influences include attributes that students brought with them from high school. It is the combination of student characteristics with the institutional and external factors existing at an institution that produces the cognitive and affective outcomes (Astin, 1993b, 1996; Boyer, 1987; Kuh, 1996; Lester, Srikanta-Rao, Green, McLure, & Boatwright, 1998; Pascarella, Bohr, Nora, Zusman, Inman, & Desler, 1993; Pascarella & Terenzini, 1991; Terenzini, Pascarella, & Blimling, 1996).
In spite of the many agreements and counterpoints identified in the literature above, the theories proposed seemed to lean toward a consensus on the conceptualization of student life on university campuses.

![Diagram of the I-E-O Framework, Elaborated](image)

**Figure 1.2: The I-E-O Framework, Elaborated**

**Purpose of the Study**

First, the purpose of this study was to investigate the factors which influence the success of African American college students at an historically black, public university. This topic has only been minimally researched. Second, the study examined how the interplay of I-E-O affects student development and success in relation to some identified variables utilized in this investigation. The examination helped identify those factors which contributed significantly to educational success by focusing on two specific outcomes in regard to students' college experiences. Finally, the study helped determine how the college campus environment has influenced academic success from the perspective of students, faculty, and staff.
Statement of the Problem

While the enrollment of African American students in institutions of higher education has fluctuated over the past 20 years, enrollment of African Americans at HBCUs has shown a steady increase during this period. This increase in enrollment has been accompanied by increased financial investments in these institutions from both state and federal sources. However, in comparison to TWIs, there has been little research on the educational processes at HBCUs. Although there is some evidence that African American students at HBCUs are more likely to matriculate at a normal pace and ultimately attain a degree than are those at TWIs, little is known about how these results are achieved (Allen, 1992; Bohr, Pascarella, Nora, & Terenzini, 1995; Wenglinsky, 1996).

For instance, although there are over 4000 postsecondary institutions of higher learning in the United States, only 3 percent are HBCUs. Notwithstanding, HBCUs enroll 16 percent of all African American students in college, and approximately 27 percent of all B.A.s obtained, as well as bachelors degrees in the sciences and engineering degrees awarded to African Americans, were from HBCUs. Furthermore, of the number of African Americans who earned their doctorates, about 35 percent attended HBCUs at the baccalaureate level (Chronicle, 1999; Wagener & Nettles, 1998). The success experienced by the African American students in earning degrees at HBCUs represents significant achievements worthy of examination. Therefore, the present study was designed to provide insight into the educational processes leading to success, or failure, for African American students at a large, historically black institution in the south-central part of the United States.
Educators, policy makers, and researchers alike need to know whether the success of African American students at HBCUs is influenced by the same factors as those that influence the success of African American students in other settings such as TWIs. In addition, HBCUs receive the lion’s share of their revenues from government sources because they do not attract big donors or largess in the form of grant money as do TWIs. For instance, in the 1993-1994 academic year, state, local and federal support amounted to 64.5 percent. This support has not waned because in 1997-1998, Southern University Baton Rouge received 63.6 percent of its revenues from the government (SUS, 1994, 2000). Consequently, there is a need to study the success of students in HBCUs in order to justify the government’s huge investments in these institutions and to determine that these resources are being used effectively. Similarly, as a result, educators and the government want to know whether these students are receiving quality education, and they want to determine the likelihood that HBCUs increase the chance of graduation of their students.

These reasons provide the impetus for studies such as this one which will serve as a tool for the continued survival, vitality, and effectiveness of minority colleges and universities. Conscious efforts must be made by researchers to focus their investigation on this neglected terrain. Also, the need to update previous studies on African American college students has necessitated further research. Although this study was aimed at replicating the work of Murtaugh, Burns, and Schuster (1999), which provided methods for predicting retention of university students, for this study,
I specifically applied the I-E-O assessment model to determine the factors that influence African American college students' academic achievement and predict students' retention at one HBCU. Similarly, I utilized both quantitative and qualitative methodologies to examine the factors that influence the performance of African American students and their graduation from college.

Research Objectives/Hypotheses/Research Questions

Objectives.

The overall objective of this study was to identify the factors that influence academic performance and ultimate success of students at an historically black institution as measured by the GPA and degree attainment of the students. The specific objectives of the study were to show whether students' first-term GPA and degree completion are influenced by (1) students' race/ethnicity, gender, admission status (whether native or transfer student), ACT/SAT score, age, residency, housing arrangement, enrollment status, and retention, variables which are regarded as input, environmental, and intermediate outcome variables and by (2) student, faculty, and other personnel's perception of the factors which determine academic success. The following are the research questions and hypotheses developed for both the qualitative and quantitative phases of the study:

Hypotheses.

1. The input predictors (gender, age, race, residency, admission status, and ACT score) and environmental variables (enrollment status and housing) will have a positive correlation with the GPA of freshmen.
2. The partial regression coefficients for each of the input predictors (gender, age, race, residency, admission status, and ACT score) and environmental variables (enrollment status and housing) will be positively related to freshmen first-term GPA of students at Southern University Baton Rouge.

3. The length of time it takes to graduate will be positively related to the GPA, ACT, gender, race, enrollment status, age, and housing of students at Southern University Baton Rouge.

Research Questions.

1. What factors contribute to the success of African American students at Southern University?

2. Does Southern University have a caring and nurturing environment conducive to learning?

3. What policies has SUBR put in place to create a nurturing and caring environment for its students?

4. What are inhibiting factors to African American students' success at a predominantly black institution, and how do the successful students overcome such barriers to their academic success?

The qualitative data used in this study was collected from interviewing current students and university personnel (Merriam, 1995; Patton, 1990) who have been exposed to the University five years prior to being included in the study about the impact of college experiences. Forty-eight students were selected from the 1,910 total number of native and transfer students. This sample size is considered large enough in qualitative study for representativeness and rich information. Additionally, fourteen university personnel were interviewed for the study. I addressed four main questions and several subquestions related to the students' success in college as measured by the GPA and degree attainment of the students. From the interviews conducted, I compared responses across gender, race, housing arrangement, and
admission status. Personnel interviews were compared across race, college/department, and their employment status. The data generated from these interviews complemented the quantitative component. Full methodological approaches and implementation of the study are covered in Chapter Three. The subsequent questions for the qualitative studies are included in the appendix.

**Definition of Terms**

The terms and variables used in this study are defined as follows:

**Academic Success/Performance/FTSGPA:** The actual accomplishment at the University as determined by the student’s first-term (Fall 1993) semester grade point average (GPA).

**ACT/SAT SCORE:** A student’s American College Test average score, derived from subtests of English, mathematics, social sciences, and natural science. The maximum score on the test is 36. An indicator of precollege academic performance, the SAT stands for Scholastic Achievement Test. Popular in parts of the country other than the Southeast and used to place students in college like the ACT, the SAT’s highest score is 1,600. For the purpose of this study, the scores of those students with SAT scores only were converted to equivalent ACT scores.

**Admission Status (ADMSTATUS):** Refers to native and transfer students.

**Cohort:** A specific group of students established for tracking purposes. In this study, it refers to freshmen who entered the University for the first time (N = 1,711) and transfer freshmen (N = 199) who did not spend more than one semester at a prior postsecondary institution.
**Degree Attainment/Degree Completion**: Refers to a student’s earning a degree within the generally accepted four-year curriculum for obtaining a bachelors degree. The Student Right to Know Act of 1991, however, requires that calculation of graduation rates includes all students who graduate within a six-year period from the same institution at which they began their college career. In this study, degree attainment and degree completion are used synonymously.

**Effective Institution/Retention**: An institution may be considered effective in retaining its students when the actual retention rate for the institution is greater than the predicted rate, given a set criteria. For instance, students with a FTSGPA of 3.00 and above are considered as successful students.

**Enrollment Status/ENRLSTATUS**: Refers to whether a student enrolls as a full-time student (takes at least twelve hours or more of coursework) or enrolls as a part-time student (takes fewer than twelve hours of classes or coursework during the semester).

**Historically Black Colleges and Universities (HBCUs)**: Accredited institutions of higher education founded prior to 1964 with the primary mission of educating African Americans. These institutions are included in the predominantly black category if, and only if, African American students make up more than 50 percent of their current enrollment.

**Housing Arrangement**: Students who choose to live on campus (dormitory) versus those who live at home or rent apartments.
**Native Students:** Students who attend the University for the purpose of obtaining a degree by beginning their first semester at the same University and who have never attended any other institution of higher education prior to coming to the University. These groups of students are often referred to as first-time, beginning, or entering freshmen.

**Nonresident Alien:** A person who is not a citizen of the United States and who is in this country on a temporary basis and does not have the right to remain indefinitely.

**Nurturing Environment:** Positive atmosphere which exists at a predominantly African American college campus and which has the following attributes: bonding, survival skills, caring, choices to take constructive paths, understanding, and sense of belonging.

**Persistence Rate:** The rate at which students interrupted their study and dropped out of school at least one Fall semester versus those who did not stop-out during the Fall semester for the entire five-year period.

**Predominantly Black Institution (PBI):** Institutions in which African American students comprise more than 50 percent of the total enrollment.

**Sense of Blackness:** A situation in which African American students are clearly in the majority on the college campus.

**Success:** It is defined in at least three ways when considering students at a four year university: grade performance, retention, and graduation. Consequently, these measures can be used as key performance indicators (KPIs) either independently or
jointly to determine students' success in receiving or the success of the institutions of their matriculation in providing a quality college education. This is why PIs have become a norm rather than a rare practice in the academic community and why chief executive officers (CEOs) in institutions of higher learning pay close attention to these indicators nowadays. These measures have received the increased interest of stakeholders in higher education as the indicators are now used for peer comparison, for determining institutional effectiveness, and for funding purposes by state legislators and governments across the country.

Transfer Students: Students who terminate enrollment at one University and enroll at another and spend no more than one semester at the initial institution.

Assumptions of the Study

Three assumptions guided this investigation:

(1) That the records extracted from the Louisiana Board of Regents are accurate for use in this study.

(2) That the data received from the institution for use in this study are accurate for the purpose of this study.

(3) That the sample of subjects was representative of the population under study.

Limits of the Study

The scope of this study was limited in nature because additional variables that could have had an effect on student performance were not available, e.g., the effect of financial aid, high school GPA, type of high school attended, social economic status (SES), family status, student employment status, study habits, satisfaction,
aspirations, participation in student organizations, mother's education, interaction behavior, and attitudinal variables and other factors of academic achievement. Appendixes F and G contain further detail concerning potential additional variables.

Time limitation was also a constraint to the full investigation of the subjects. It would be even more revealing if the study were carried out over a six-year period, thereby providing a possible trend in observation. The monitoring of student academic performance would be even more insightful if there were no constraints in conducting studies across semesters for the determination of the academic performance of students beginning from when they came into the University until the point of graduation. Such a comprehensive longitudinal study, although feasible and encouraging, calls for personnel and the availability of databases, time, and money.

What makes the present investigation important and demanding was the mixed model approach adopted.

**Significance of the Study**

This study may be considered an important one for many reasons. First, it provides added insight into, as well as a contribution to, the literature and theory on the academic performance of students at Southern University and other universities, particularly HBCUs. Second, it also contributes to the performance measurement debate by providing different lenses through which institutional effectiveness can be scrutinized. It is important to gather information on the graduates of predominantly black colleges if such information could reveal how they overcame barriers and successfully completed their degrees. This sort of information will provide various
components of the university with the data necessary to better assist students in achieving their academic goals. The study may also be used to provide a justification for an extension of data mandated for universities under the Student Right to Know Act of 1991 (Astin, 1997). If the study established, for example, that living in the dormitory positively affected the academic performance of students, on-campus housing demands may increase because the study has revealed a factor that could favorably influence students’ decisions to live on-campus in order to improve their academic achievement. The findings from this investigation, therefore, can have very important implications.

Most importantly, the findings of this study will be useful to university decision makers. As more demands for accountability are made by CEOs of institutions of higher learning, colleges such as Southern University in Baton Rouge can use the results of studies like this one for accreditation purposes. The findings can be used to demonstrate the achievement of the students to the accrediting bodies which have recently adopted a policy emphasizing students’ degree attainment for reaccreditation of colleges and universities. The University can also make the study part of its data bank in its accountability reporting to the Board of Regents and other funding bodies throughout the country.

Organization of the Study

Chapter One is an introduction to the study and provides the study’s conceptual framework, statement of the problem, discussion of the significance of the study, and statement of the hypotheses/research questions to be tested. Chapter Two
contains the literature review. Chapter Three presents methodological approaches, using a mixed method design, including quantitative method and case studies of campus life. Chapter Four presents the quantitative and qualitative research results. Chapter Five presents conclusions, policy implications, and recommendations.
CHAPTER 2

REVIEW OF THE LITERATURE

Review of Access in Higher Education for African Americans

Due to discrimination and other detrimental factors, African American participation in higher education in the United States was limited during the early history of postsecondary education. The gates to institutions of higher learning were closed to African Americans until significant events in the United States secured access for African Americans at all levels in the educational arena. One such event was the landmark case of Brown vs. The Board of Education of Topeka, Kansas in 1954. Before that time, very few TWIs admitted African American students. Olivet College, located in Olivet, Michigan and founded in 1844, was one of those which admitted African Americans (Collison, 1992).

Another event that contributed to securing educational opportunities for all Americans was the passage of the Morrill Act of 1862, considered a catalyst in the shaping of the landscape of American higher education from sectarian tendencies of the past to an egalitarian educational system. The Morrill Act played a major role in this regard for many reasons and was instrumental in the establishment of HBCUs. It secured state support for higher education, provided land for their operation, changed the American college system, and promoted the establishment of different kinds of institutions, such as vocational schools like Tuskegee Institute for Negroes in Alabama.
and the Rochester Atheneum and Technical Institute in New York. Women's colleges also came into existence in 1865 (Allen, 1992; Cowley, 1961; Nettles, Thoeny, & Gosman, 1986; Wenglinsky, 1996). Other important events that contributed to the breakthrough for African Americans were the civil rights laws of the 1960s, consent decrees, and desegregation settlements. All of these government policies were geared toward guaranteeing access by desegregating the education system in the United States at all levels.

As a result, the 1960s and 1970s were periods in which America experienced the largest student enrollment increase in its history. This happened because of the open admissions policy which was adopted in most institutions of higher learning in order to make educational opportunity available to every American. Over 80 percent of American colleges and universities adopted this policy or used some form of special admissions to recruit African American students. By granting African Americans access to higher education, the United States hoped to gradually dismantle the vestiges of its past history so that African Americans, too, could have the opportunity of climbing the social ladder as well as raising their standard of living, reaching their potential, living the American dream, and partaking of their piece of the pie. Consequently, current literature, such as Rodriguez and Nettles (1993), Snyder, Hoffman, and Geddes (1997), and Zuniga (1997), on college access in America points to the fact that minority enrollment is growing, particularly among African Americans. States with large minority populations can expect growth in the number of minorities going to colleges or universities if the rate of those going to postsecondary institutions grows proportionately to the general population growth rate.
The effort to promote the education of African Americans, especially in postsecondary education, was a welcome development. Part of that effort was due to the growth of HBCUs in the country, especially in the southeast where most of these institutions are concentrated. Presently, there are 105 predominantly black schools in 19 states and the District of Columbia. Sixty-two of the HBCUs (59 percent) are private, while 43 (41 percent) are state-supported institutions. Among the private HBCU institutions, 14 are independently operated while 48 have religious affiliation. Eighty-nine are four-year institutions, and the rest are two-year institutions. Forty-one of the four-year institutions are public universities. Student enrollment at these institutions varies from less than 1,000 to over 8,000. Forty-one schools have enrollments of less than 1,000 students, 84 have enrollments between 1,000 and 3,000, and 21 have enrollments of 3,000 or more students. In 1990, 258,000 students attended HBCU schools (Hoffman, Snyder, & Sonnenberg 1992, 1996; Wenglinsky, 1996).

In spite of the record numbers of African Americans participating in higher education in response to the Civil Rights movement of the 1960s, 1970s, and 1980s, the attendance and performance records of African American students have not always measured up to those of the students of Caucasian ancestry. African American involvement in higher education can be described as unstable in terms of student access. Their retention figures are unsatisfactory, and the African American students
are underachievers with regards to performance. The special reports by Rodriguez and Nettles (1993), Snyder, Hoffman, and Geddes (1997), and other researchers concerning postsecondary access, retention, and success reveal that white students are more likely than minority students to participate in postsecondary education. For example, in 1991, approximately 62 percent of white high school graduates between 14 and 24 years old enrolled in college or finished at least one year of postsecondary study. This can be compared to 45 percent of African Americans and approximately 48 percent of another minority, Latino high school graduates. In fact, during the same year, whites and Asians were overrepresented in higher education enrollment compared to their overall population. While the percentage of American Indians in postsecondary education was about the same as their representation in the general population, African Americans and Latinos were underrepresented in postsecondary education. Although African Americans constitute 12 percent of the United States’ population, they make up only 10 percent of college attendance; while Latinos are 9 percent of U.S. population, they make up only 6.2 percent of enrollment in postsecondary education (U.S. Bureau of the Census, 1997).

It should be noted, however, that African American access, attendance, and degree attainment in higher education have been unstable due, to some extent, to the fact that the United States’ commitment to African Americans’ full participation has not been total. The doors of educational opportunity that were opened to them not too long ago have gradually begun to shut. In the face of Proposition 209 in California (Astin, 1993b), for example, the atmosphere surrounding higher education
today cannot be described as anything but unfavorable to African Americans. In a related study, Allen (1992) contends that the changing attitude of society can be seen even from the experiences of African American students on the college campuses of TWIs. He stated that African American students have negative, anomic experiences in white institutions and that they suffer lower achievement and higher attrition rates than white students. This situation probably explains the flight of African American students from TWIs to HBCUs (Collison, 1992). The exodus of African American students to HBCUs has, in turn, created a strain on the limited resources of those institutions, necessitating maximization of the utilization of said limited resources. Already, HBCUs are financially stressed because their revenues have not grown proportionately to their enrollment. Because of the limited resources at their disposal, African American institutions are in danger of losing most of their highly qualified personnel. As if this were not enough, HBCUs have come under attack in the same way that the programs which promote African American student enrollment, persistence, and success at TWIs have been attacked in proposition 209 and other anti-affirmative action crusades.

The HBCUs are likewise losing on constitutional grounds. In 1992, the Supreme Court called on the State of Mississippi to justify the existence of HBCUs or eliminate them (Howe, 1999; Wenglinsky, 1996). This attracted the attention of the U.S. Department of Education which indicated its intention to review desegregation in states with HBCUs, Louisiana included. Also, HBCUs have experienced budget cuts and are now being asked to do more with less.
There is also increased scrutiny of all postsecondary institutions across the country. In 1996, 33 or two-thirds of the states indicated that their public colleges and universities submit annual "report cards" to their legislative and executive branches either individually or as part of a system. Similarly, words such as benchmarking, outcomes assessment, auditing, peer comparisons, and performance funding became the watchwords on college campuses across the country (AASCU, 1997).

Another important trend in African American involvement in higher education that has attracted the attention of educators in recent times is the continuous decline in the number of African American males who are attending college. Part of the reason, according to Garibaldi (1992), may be teachers' apathetic attitude toward African American male students in high school. In his study of a New Orleans school district, although 95 percent of the students expected to graduate from high school, 40 percent of all students thought that their teachers were indifferent to their achievement, while 60 percent of the African American males in the study felt that their teachers should have had higher expectations of them. Of the responses obtained from a sample of 500 teachers to the question regarding their confidence about the prospects of their African American male students attending college, six out of ten replied negatively. In Garibaldi's view, the teachers were not "immune from holding negative, self-fulfilling prophecies about the children they teach" (pp. 6-7).

On the basis of the aforementioned facts, HBCUs, among others, are faced with the daunting task of creating effective institutions that promote not only access,
but also high student performance, persistence, and degree attainment. Hence, there is an increasing interest in determining the factors and experiences, in or out of the classroom which influence the performance of college students and, consequently, their success. Wenglinsky (1996), on this note, remarks that "Clearly, the day of reckoning for the HBCUs has come" (p. 93), affirming the necessity of research to measure student success. Findings from such investigations can be used to develop policies which decision-makers will use to promote the success of students.

In preparing this review, I conducted a comprehensive search to find studies or previous research works focused on the postsecondary school achievement of African Americans at predominantly black institutions. Databases for research relevant to student achievement in postsecondary education, such as sociological abstracts, higher education abstracts, dissertation abstracts, and the ERIC system, were searched. Furthermore, I tapped into conference proceedings of organizations, such as the Association for the Study of Higher Education (ASHE), the American Education Research Association (AERA), the Association for Institutional Research (AIR), and the Southern Association of Institutional Research (SAIR), to mention a few. The effort also involved obtaining technical reports that deal with the achievement of African American students in college. Most of the references I used in the review were journal articles, with an almost equal number of papers from conferences. I located three relevant dissertations. Finally, from this review, I derived the variables used in the study.
Factors That Influence Academic Performance

The changing attitude toward access to education for African Americans can be seen in the admission policies of universities and colleges. Immediately following enactment of the civil rights laws, a liberal admission policy was put in place by colleges and universities because traditional admission standards were challenged for their discriminatory tendencies. That was short-lived because there is now a resurgence of advocacy for the traditional admission policies which rely on standardized tests instead of nontraditional predictors of college performance. This leads to a consideration of the traditional cognitive attributes for studying students and the noncognitive measures that should be employed in determining the success of African American students.

Educators have always concerned themselves with the academic achievement of college students partly because that is their primary responsibility. More importantly, higher education is the backbone of a society’s survival both socially and economically. The level of interest in determining and demonstrating student academic achievement in higher education has never been higher than at the present time. In this regard, the accreditation bodies have moved from simply looking at an institution’s capacity to achieve its stated mission to evaluating its accomplishments as expressed by student achievement. In the words of Nedwek and Neal (1993, p. 4):

The accrediting days are gone when site visitation teams would be preoccupied with resources, e.g., counting books in the library or the number of Ph.D.’s on staff; the emerging questions for these assessors focus on what the students have done or achieved as a result of having experienced the institution.
Beasely and Sease (1974), Clark and Plotkin (1966), Nettles, Thoeny, and Gosman (1986), Sedlazek (1996), and many others advocate the use of measures other than standardized test results to predict the success of African American students. On the basis of their research, they argue that different factors predict differently the success of white and African American students. Among the variables identified for African Americans are motivation and goals, reasons for attending college, biographical characteristics, and extracurricular activities, regardless of scores on standardized examinations. Additional valid indices of college achievement include educational aspirations, precollege preparation experiences, and social academic support. These may be used as alternatives to the traditional college admission criteria of standardized tests, high school rank, and high school grade point averages.

The National Center for Education Statistics provides four conditions under which an indicator is considered useful. First, the indicator must reflect broadly representative practices or conditions. Second, it must reflect processes or phenomena that are important in their own right. Third, a potentially useful indicator must be able in some fashion to help inform policy action either by enabling broader public understanding of a given condition or by suggesting a mechanism for change. Finally, all good indicators must be capable of universal application and must be valid and reliable (Corrallo, 1994).

This changed emphasis is part of a larger movement that gradually introduced quality assurance assessment in the operation and governance of higher education. Consequently, it is the concern for academic achievement that spurs the desire by
education professionals to investigate the effects of various factors on the academic performance of university students. This section examines several studies conducted on academic performance among college students and concentrates on specific variables which studies have indicated predict student academic performance. Many of these studies on academic achievement have utilized grade point averages as indices of success in college.

Corrallo (1994), Glover and Hull-Toye (1995), Townsend (1993), and a host of other scholars support the use of transcript study as one fundamental means for measuring academic achievement. In this regard, the National Center for Education Statistics (NCES) in its publicized work *Good Practice Indicators in Undergraduate Education* supports the use of standardized tests, such as the Graduate Record Examination (GRE), the American College Test (ACT), and the National Teacher's Examination (NTE), as good indicators in their own right, but also equally emphasized that they must be complemented with other methods of measuring scholarship achievement. Transcript studies, among others, are acknowledged as good indicators of success and would, therefore, support the use of GPA in this investigation.

According to Glover and Hull-Toye (1995), grade point averages obtained from students' transcripts have long been the benchmark for gauging the success of schooling. However, the subject of assessment of student satisfaction with their college experiences, goal attainment, personal growth, and career preparation has enlarged the lens for viewing the total college experience. The use of transcript
studies to observe student achievement is important because it contains student grade point averages and other relevant demographics on the student that may otherwise be inaccessible. Demographics such as gender, ACT scores, and high school performance records are all important in the measurement of student achievement in college.

In contradiction, Kuh (1981) casts doubt on the use of transcripts (grade point averages) in the determination of success among college students. The reason offered for such a stand was that during the 1960s grade point averages actually declined when the average ability (as measured by entrance examinations) of students greatly increased. During the 1960s and 1970s, it was acknowledged that grade inflation was the order of the day, while during the same period, entrance examination scores declined. The explanation offered for the higher grades awarded during the 1970s suggests that grade inflation was the faculty's delayed adjustment to increased "quality" (ability of students in the late 1960s). However, another respected scholar (Astin, 1977) in looking at student achievement set forth the view that grades are an important source of feedback for students and may serve to motivate and reinforce certain valued behaviors, such as studying and interaction with faculty. Thus, overall, the literature is unclear as to the relationship between grading practices and quality.

Another set of studies by Cappelli (1992), Goldstein and High (1992), and Pascarella and Terenzini (1991) suggests that college grades are poor predictors of future job performance. This view seems to lean towards earlier suggestions by Kuh. Several studies conducted recently, however, do not have any reservations about the
use of the transcript (grade point averages) as a measure of student achievement. These studies together suggest that there is unanimity in its use as an indicator of student achievement in school, especially among college students.

Other related studies (Delucchi, 1993; Nettles, Thoeny & Gosman, 1984, 1986; Smith & Allen, 1984; Wenglinsky, 1996) employ the GPA as a measure of student performance. Some of these studies use the GPA as only one of the variables of interest, along with others. Notwithstanding, the numerous applications of the GPA suggest the importance of such a variable. However, it is not without some shortcomings, as put forth by Kuh (1981) regarding the likelihood of grade inflation on any campus. Pascarella and Terenzini (1991) recognize this problem as well and warn against this indicator's use for institutional comparison purposes. Furthermore, in cases where surveys are used, the GPA (self-reported) may be incorrect because of over-reliance on the memories of respondents, which may not always be accurate, as it is doubtful whether participants take the trouble to locate their transcripts for the express purpose of responding to a survey. There is also fear that many extraneous variables may affect the GPA, such as the policy common on college campuses which stipulates that students should be given an automatic grade of "F" if they fail to withdraw from a course or school by a certain date in a particular semester. This explains why Nettles, Thoeny, and Gosman (1984) suggest that Freshman GPA is the most commonly used criterion variable because the time lapse between the measurements is small.
Some of these authors, Arrington, et al., (1994), Corrallo (1994), and Gaither, Nedwek, and Neal (1994) provide the theoretical framework for determining students’ success, but they fall short by not looking at specific areas of student performance and advancement. Their works are, for the most part, generalizable and encourage the need to observe the underpinning empirical facts of academic performance. Without direct application of specific factors (the variables) quantitatively, their reliability and validity are questionable at best. Perhaps some of the authors deliberately concentrated their attention on the qualitative aspects of the performance debate and left other researchers to explore the authenticity of identifiable variables.

**Input Variables**

There are many studies that deal with input variables, such as gender, race, ethnicity, age, and residence among others in performance studies. Most frequently, gender differences are examined as a good predictor of academic achievement. Several of these studies have also investigated gender differences as they affect performance on standardized tests and their conclusions are considered applicable to both college and high school students taking standardized tests, such as the ACT, SAT, NTE, LSAT, and GRE.

Keeley and House (1993) consider gender to be one of the characteristics that influence college students’ performance. The authors indicated that among those who were transfer students, women brought better grade point averages to the four-year institution than men. Also, women generally outperformed men at two levels,
sophomore and junior classes, and in particular at the junior level where average fourth-term GPAs were very different (3.137 vs. 2.829). In fact, junior women outperformed men at every point in time, whereas sophomore women's first-term GPA dropped about as low as did men's only to be about .15 points above the men's after four terms. This pattern may be due in part to the choice of study majors in which women enrolled relative to men at the institution although women did bring in higher transfer grade point averages than men, regardless of major concentration.

Findings from many of the existing studies on African Americans on college campuses have indicated that the success of white and African American students in the United States was almost predicated on gender and on the type of institution attended, although, generally speaking, African American females tended to record higher performances in terms of their GPA and retention than the males regardless of the institutions they attended (Fleming, 1984; Gurin & Epps, 1975; Smith & Allen, 1984; Thomas, 1984).

Allen (1992) revealed that African American students at HBCUs had higher academic achievement than those at TWIs. Students' gender and economic background as well as the environment were also found to be significantly associated with high school GPA and self-concepts, among other findings. This may be attributed to the fact that African American students, when compared to their white counterparts, come from parents who have less education and who live in more urbanized communities, work lower-status jobs, earn less, and have lower social-economic status (SES). Additionally, African American students more frequently have divorced parents than do white students (Blackwell, 1982; Nettles, 1988).
Nettles, Thoeny, and Gosman (1984) suggested that African American and white women performed better than males because they had higher grades than men of the same race. In addition, Fuhrmann, Armour, and Wergin (1991) found that African American males at TWI's differed from other freshmen in their values, aspirations, and assumptions about college. According to these authors, African American women also appeared to be more successful than males as revealed by their first semester GPA. Furthermore, if aspiration for college education is any indication to go by, more women are now involved in higher education than men. For instance, the proportion of white students in institutions of higher learning by gender is 55.5 females and 44.5 percent males. On the other hand, among African Americans, 62.4 are females and 37.6 males enrolled in colleges and universities throughout the United States in 1996 (Snyder, Hoffman, & Geddes, 1998).

In studying the factors that influence academic performance, some writers have focused their attention on the nontraditional predictors of academic success. These authors posited that the nonacademic characteristics which students bring with them to college are related to their academic achievement, a position which is predicated on the findings of many previous research investigations. For instance, Clark and Plotkin (1964) found that predictors revealing the performances of white and African American students were different. Other scholars, such as Beasely and Sease (1974), discovered that biographical or personal characteristics and extracurricular activities in which students participate, including music, student government, speech, science,
art, and so forth, were valid variables for predicting the GPA and persistence of African American students.

On the other hand, there were those who advocated using other traditional predictors of college performance. This group rejected the differential theory of predictors suggested to determine African American and white college student performance. Thomas and Stanley (1969), for instance, identified through correlational study that aptitude tests were better than noncognitive predictors in the performance of African American students. A similar study by Cleary (1968) found no significant racial differences in the values of standardized entrance tests and other precollege academic characteristics (e.g., high school grades and rank) as predictors of college performance.

Nettles, Thoeny, and Gosman (1984) pointed out that Breland's 1978 comprehensive review of population validity studies on college entrance examinations and different population groups concluded that when identical regression equations using ACT/SAT scores are applied to African American and white students, there was a great likelihood of overpredicting the college performance of African American students. This position suggests that although the same predictors may be adequate for students of all races, some events may occur during the college experiences of African American students that could cause surprisingly lower performance levels than would be predicted by regression equations utilized for white students. This further implies that noncognitive variables describing the college experiences may have some impact upon the college performance of students, particularly of African
American students. This situation further strengthens the arguments for looking at nonacademic variables that may be success factors among minority students.

In a recent study, Astin (1997) supported this thesis by asserting that assessing institutional performance by means of retention rates, student performance on standardized tests, and other raw outcome measures was seriously flawed because such measures failed to take into account the powerful effect of student input. This, of course, calls for the consideration of the fact that colleges and universities whose actual retention rates are low may be in such a situation because of the kinds of students they enroll. In the case of historically black institutions, the students are mostly underprepared students who come from low socio-economic status (SES), single parent homes and ineffective schools. Using a measure such as student input (refer to Astin, 1993b, pp. 193-194) alone, without even considering other factors such as the major field of study and the environment, already indicates that African American schools and students are at a disadvantage.

Another study, "Modeling Black Student Academic Performance in Higher Education" (Smith & Allen, 1984), attempted to delineate those factors which contribute most heavily to educational attainment among African Americans. These writers find that not all family background variables, such as parental education, occupation, and family income, have equal importance. For instance, the education and occupations of mothers were found to have different and more powerful effects than those of fathers, depending on the sex and race of the student. This point was especially relevant in reference to African Americans because of the "absent father"
syndrome. In many cases, the indices of fathers' attainment were missing among African Americans as opposed to white students, and there was no agreement on how to control this measurement error.

One such way to adjust for African Americans, it has been argued, is to modify the original model by including measures of institutional characteristics that would enhance a better understanding of the African American educational achievement process. In this way, the African American student success model would include gender, mother's education and occupation, and family income as demographic variables. Measures of ability other than standardized tests are also important. Because this is exploratory research, the descriptive features of the institution may also be important (e.g., location, size, and orientation). Furthermore, student attributes, such as residence, dependency status, alienation, time to degree, etc. that may influence performance, are important factors to be considered. Among the factors recommended for inclusion by these authors are students' grades and occupational aspirations which serve to operationalize educational outcomes.

Allen (1992) also explored how background or individual characteristics as well as campus environment and personal adjustment assist or inhibit academic achievement among African American students at a historically black institution and at a predominantly white institution. Some of his findings suggested that African American students who attended an historically black institution performed better than African Americans attending a TWI. There was evidence of a positive relationship between occupational aspirations and academic performance. Furthermore, the level
of social involvement was dependent on the feeling of whether the student made a right choice of college or not. The gender and economic background of students were also predictors of college outcomes. In short, educational background, aspirations, demographic characteristics, personal adjustment, and campus environment on African American college campuses affect outcomes, when measured by academic achievement. Social involvement and career aspirations were areas of interest and were thought to be important variables among success factors for African American students.

Environment and Noncognitive or Nonacademic Variables

Germane to the success of African American college students is the environmental hypothesis factor. Terenzini, Pascarella, and Blimling (1996) chronicled the effects of environment on performance of college students in general. In their study, areas of focus included residential living, fraternities and sororities, intercollegiate athletics, employment while in school, other extracurricular activities, faculty interactions, and peer interactions. The students' living arrangements received the greatest interest among researchers; thus, it has the largest body of literature. Those who have investigated living arrangements indicate that students who live on campus perform better than those who commute and live either in apartments by themselves or with their parents because of the added advantage of students' social interaction with peers and increased contact with their professors.

Another study by Bohr, Pascarella, Nora, and Terenzini (1995) summarized the position on environment in relation to African American students at predominantly
black institutions by suggesting that the supportive environment has made it possible to create a social-psychological climate that not only fosters satisfaction, a sense of community, and adjustment to college, but has also increased the likelihood of persistence and degree completion. The findings further revealed that the supportive campus environment of predominantly black institutions did not come at the expense of intellectual rigor (p. 82). These authors also concluded that cognitive effects of college race composition were general rather than conditional. This means that they were not significantly influenced by a student’s individual characteristics, such as gender, precollege aptitude test, academic motivation, age, and socio-economic origins.

Many other important studies by Astin (1991), Delucchi (1993), Pascarella, Bohr, Zusman, Inman, and Desler (1993), and Pascarella and Terenzini (1991) have shown that a correlation exists between students’ residential accommodation and their academic performance. While exploring the possible impact of living in the dormitory and living in adjacent apartments close to the campus, past studies have found that living on campus fosters academic performance through expanded opportunities for integration into the academic (e.g., interaction with faculty) and social systems. For instance, living on campus or in adjacent apartments fosters frequency of peer conversations and informal social activities with colleagues on campus. By contrast, commuter colleges and those with few students living on campus are believed to lower students' integration by making it more difficult for students to become involved in competing social roles, by limiting access to faculty
outside the classroom, and thus decreasing peer and faculty socialization to traditional academic norms and values.

Another team of scholars, Keeley and House (1993), also included characteristics of student life as part of their investigation and concluded that the housing situation in which transfer students found themselves when they entered a four-year university was a factor in academic performance. They observed that juniors who commuted to campus showed significantly higher grade point averages than both those living in the university residence halls and those living in off-campus housing. Another likely variable that may be related to this was the age of commuter students which was also shown to be an important factor in transfer student performance.

Based on the foregoing analysis, it is evident that the proximity of apartment housing to campus will produce an environment similar to that of dormitories although some differences between near-campus apartments and campus dormitories were noted. The differences were in the form of conditions, amenities, and other benefits that may exist in one and not in the other. Some of these were that dormitories tended to have more staff on hand, and most dormitories offered opportunities for student participation in policy setting and activity programming in residence halls. Finally, security was likely to be more elaborate and may have consisted of security guards, campus police, and residence officials who controlled admission in and out of the halls more so than in apartments. On the other hand, apartment housing near college campus continues to be increasingly popular among students. Some of the apartments
are acquired by colleges from private owners and remodeled to meet the expectations of students. Still, a large number of apartments are owned privately and located next to the campus.

These studies showed that grade point averages were influenced by place of residence. Also, being a commuter student had a significant but positive effect on academic performance in comparison to living in an apartment next to campus. Commuter students may have performed better because they stay with their parents and thus do not have the limitless freedom that those who stay in apartments have by themselves. While holding constant all other independent variables, Delucchi (1993) found that commuter students had GPAs .19 grade points higher than residents in the student community. The effect of the dormitory residence was also positive, but it was not statistically different from apartment housing. How this situation affects African American students in a predominantly black university needs to be determined in clear terms. Perhaps living in such an environment (dormitories) can produce strong beneficial effects on student performance and thereby prove to be a means of counterbalancing, to a certain degree, some of the deficiencies students brought with them to college.

Hall (1993) focused her study on the academic performance of two classes of students, native and transfer, who graduated over a four-year span. Part of the scope of the study was to look at the differences in performance between native and transfer students. Specifically, native students were those who started as freshmen at Auburn, the institution Hall represents in the research, while transfers were those students who
enrolled (one semester) and earned minimum hours from another institution before later coming to Auburn. The study focused on the following: grade point averages (admission status), hours earned before graduation between the two types of students, and length of time to graduate from the programs. Some studies, including that of Hall, revealed that in the study of performance, transfer students require special attention. These are students who spend at least one semester and earn some credits towards their education at one university before transferring to another. In order to examine their itinerary and its effect on their academic performance, the students' transcripts become the only source of information, and in most cases, they had to be compiled manually, as was the case at Auburn.

Another characteristic that makes study of achievement receive increased attention with regard to transfer students is that scholars want to know the effect of these students' experiences at the junior college. An increasing number of students are attending junior colleges before going to a four-year university because of the low tuition. Furthermore, people in academia want to know the effect that the adjustment problems students face in coming to four-year institutions have on their academic performance (Head, 1992). Above all, state agencies and other researchers want to know whether community colleges prepare students better in terms of their achievement when they later go to a four-year university in comparison with students who go straight from high school to the four-year university. Other studies tend to show that transfer students face transfer shocks in their new institutions and that these affect their performance at least in the initial stage of their transfer activity and that,
over time, their performance tends to be no different from those of their native student counterparts (Keeley & House, 1993). Among the problems faced by transfer students are unfriendly attitudes by their peers in class and by their instructors.

In order to illustrate the point raised about transfer students, an investigation conducted by the state of Kansas is reviewed. Johnston County Community College (JCCC) (1992) performed a full-scale study to determine the number and characteristics of Kansas students transferring from the state's community colleges to one of the state universities. The study was centered on comparative academic performance, graduation, and persistence rates of community college transfers and their native university counterparts. A similar study was conducted in 1985, thus making it possible to compare both findings. The apparent reason for state interest in community college students who transfer to the state institution was to determine whether state dollars were utilized well, or, put differently, "getting the bang for the bucks" in preparing students for college work with respect to their scholastic achievements.

The Kansas study revealed that there was an increased number of transfer students from 1979 to 1983 and that unchanging student characteristics suggested high satisfaction rates at both kinds of institutions but higher attrition rates for community college students. In the 1992 study, however, interviews conducted with former community college students who enrolled in state colleges in the 1985-86 academic year confirmed that enrollment continued to increase although the growth in enrollment was not at the same pace as in the original study. The student
characteristics of age, test scores, and grade point averages were the same as in the first study. The academic performance of community college students in their first semester after transfer was found to be lower than that of the native university students. Transfers persisted at substantially lower rates than native university students, confirming findings from the first study and from interviews of thirty-three former community college students.

Recinos (1993) presented another study that focused on the academic performance of transfer and native students but from a different perspective. The academic performance of native and transfer students who attended private independent institutions was studied. His dissertation included three cohorts from three different universities and also followed the students for a minimum of three years. Although native students' data were obtained from student files, a survey was also administered to the transfer students. In the end, several statistical analyses were done.

Recinos's findings showed that transfer students at small private colleges do as well as native students at each level of the measured competitiveness, and it was not the academic preparedness, but gender differences that affected the ability and persistence of transfer students. Additionally, what transfer students thought about their community college experience also influenced their persistence and their ability to do upper division work. In social and student activities, the persistence of transfer students increased when they studied with other students. The grade point average of transfer students improved when they participated in classroom discussions as a result of their instructors' encouragement.
One of the areas of interest in respect to student achievement to Hall (1993) was the amount of time it took Auburn graduates to complete their degrees. One of the conclusions of her investigation was that there was a noticeable change in the mean number of quarters (Auburn uses the quarter system) it took to earn a degree, regardless of whether the student was a native or transfer student. According to her study, there was a consistent increase through the years in the number of quarters it took Auburn students to graduate. For instance, in 1963-64 it took 14.1 quarters to earn the baccalaureate. By spring 1988, it took 16.4, and by 1990-91, 16.3. By contrast, Auburn's curricula were modeled primarily to require 12 to 13 quarters to graduate in selected areas of concentration or majors. The finding that there was an increase in the time it took to graduate and that the increase was common to both native and transfer students suggested that there was a need for the university to rearticulate this aspect of its curriculum.

The type of college students who enroll in undergraduate studies is another area that has attracted researchers' attention. Kasworm and Pike (1994), Nettles, Thoeny, and Gosman (1984), and others conducted investigations on the age of students as predictors of academic performance. The interest in this area has been prompted by the changing nature of student enrollment which shows that more nontraditional aged students, that is, 24 years and older, made up nearly 45 percent of students who enrolled in undergraduate education during the 1992-93 academic year (Snyder, Hoffman, & Geddes, 1995). Because of the changing nature of student
demographics when considering age, there is a need to determine the factors that influence students' performance in college. In addition to this, the backgrounds of nontraditional students differ when compared to those of traditional eighteen-year-old college students. Often nontraditional students, according to previous research (Tinto, 1993), were considered to be at a disadvantage in college because of their family backgrounds, because they are less involved in the academic and social life of the campus, and because they are inadequately prepared for college work. These conditions when applied to predictive factors on academic performance suggest that older students will have lower grade point averages in college. But research shows that this notion is inconclusive because of contrasting positions on the findings. Obviously, more research is needed to ascertain the factors that influence the academic performance of older college students.

Nettles, Thoeny, and Gosman (1986) also advocated the inclusion of nonacademic factors in predicting students' performance and achievement in order to broaden the lens that is used to determine students' learning and performance outcome. These include in-college attitudes and behaviors of students and faculty, and other institutional characteristics, some of which were highlighted by Bohr et al. (1995) and Astin (1997). The reason is that studies of this nature, which also center on retention, must be geared towards understanding in great detail what, besides precollege biographical and intellectual factors that often leave other pertinent determinants unaccounted for in a regression equation, accounts for the success and overall performance of students.
There is substantial literature on psychological theories of development of the students on academic success. Apart from the traditional theories which lean heavily on cognitive or intelligence, as earlier alluded to, the psychological (noncognitive or nonacademic) aspects have received great attention recently. These theories are widely recognized as critical, influential factors on behavior and learning. Stage (1996) identified some of these theories, among which are satisfaction, motivation, self-efficacy, attribution, collaborative or integrative learning, and a host of others. Additional noncognitive influences that fall under this category are students’ expectations or aspirations, self-concept, and intentions. Because students’ behavior in college and influential factors are intertwined, few are selected at the same time in one study because they measure similar behavior and avoid multicollinearity. These factors may inspire students to devote time and energy to educationally purposeful activities both in and outside of the classroom. In fact, according to some researchers, these may be responsible for poor performance and withdrawal from college, particularly by African American students and other minorities, rather than the financial explanation usually offered by students as the reason for their departure (Astin, 1975, 1977, 1993b; Tinto, 1993). Similarly, Banta, Lund, and Oblander (1996), Ewell (1984), and Terenzini et al. (1996) established that these factors may very well account for the variants unaccounted for in a regression equation instead of the financial explanation frequently offered when asked for the reason for low achievement or low persistence level.
Perhaps no other person has done as much work on noncognitive variables for determining success factors among African American college students and other minority students as William E. Sedlacek (Boyer & Sedlacek, 1988; Helm, Prieto, & Sedlacek, 1997; Sedlacek & Brooks, 1976; Sedlacek & Pelham, 1976; Sedlacek & Webster 1978; Sedlacek, 1987; Sedlacek, 1998; Tracey & Sedlacek, 1981; Tracey & Sedlacek, 1984; Tracey & Sedlacek, 1985; Tracey, Sedlacek, & Miars, 1983).

Sedlacek and Brooks (1976) are credited with proposing that noncognitive variables are predictive of academic success for minority college students. These variables are as follows: (1) leadership, (2) preference for long range goals over short, (3) self-confidence, (4) realistic self-appraisal, (5) an understanding and ability to deal with racism, (6) demonstrated community service, (7) a strong support system for college plans, and (8) academic familiarity. According to both authors, these variables should be used in gauging or promoting the success of students. In furtherance of this proposal, they developed a questionnaire for assessing the eight noncognitive factors they found to have validity and reliability in studying minority students, particularly African Americans and other minorities on college campuses nationwide. The work of Sternberg (1985) supports that of Sedlacek by proposing the theory that there are three forms of intelligence: the triarchic theory of intelligence. These are componential, contextual, and experiential intelligence.

Componential intelligence is associated with traditional problem-solving approaches common to standardized tests, e.g., the SAT and ACT, while Sedlacek suggests that African Americans and other minorities should be measured from
experiential and contextual angles. Experiential intelligence is the ability to interpret information, i.e., be creative. Standardized tests, according to Sternberg, are not aimed at capturing this form of intelligence. The third type of intelligence, according to Sternberg, is contextual intelligence. This involves the ability to handle and negotiate the university system and survive. This can be illustrated with a simple analogy which shows that to do otherwise would be to act like a doctor who prescribed the wrong medicine in an attempt to heal the patient.

In many of his writings, Sedlacek made a compelling case for utilizing noncognitive variables in promoting the success of African Americans in college from admission through graduation. He has recommended that these variables should also be used when studying law, medical, and international students. He went one step further to prescribe approaches, such as interviews, portfolios, and questionnaires, that may be used to assess all students. It is noteworthy, however, that most of his studies were conducted on African American students at TWIs. Nevertheless, the relevance of Sedlacek's work has been widely recognized, and his contributions to understanding African American college students has been acknowledged in the academic community.

HBCUs: A Nurturing Environment for African American Students

Available literature on HBCUs suggests that these colleges and universities provide social, psychological, cultural, financial, and other campus support systems which their students would not find in non-African American institutions (Allen, 1992; Astin, 1968; Pascarella & Terenzini, 1991; Terrell, Mueller, & Conley, 1991).

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According to Allen, "The black universities provide positive social and psychological environments for African American students that compare to those experienced by white students who attend white universities." Another educator, Calvert Smith, has posited that "the success which these institutions have made in responding to the needs of black students have come irrespective of the score they have made on Scholastic Aptitude Tests (SAT) or American College Test (ACT)." He further states that "in many cases, these institutions graduate students equal or superior to graduates of white institutions." Indeed, Calvert Smith (1981) contends that the special ability of historically black institutions to provide college opportunities, as well as the capability of the students who attend them to capitalize on these opportunities, indicates, in the strongest of terms that HBCUs have the unique ability to reach the unreachable, teach the unteachable, and embrace both the rejected and the valedictorians with equal concern.

Other environmental conditions that exist on the HBCU campuses include adequate mentoring, sense of blackness, lower fees, sense of family, caring, and a deep sense of comfort. Above all, there is the existence of an environment that addresses any academic deficiencies no matter what the score is on standardized tests such as the ACT/SAT. Rather than discourage students on account of poor scores on standardized tests, HBCUs provide an embracing climate that tells students that they can succeed and reach their potential. For example, Xavier University has the record of producing more African American medical students than any other school in the nation (O’Brien, 1989). Two noted scholars, Dr. Thomas Cole, President of Clark
Atlanta University and Dr. Tracy Robinson of North Carolina State University in *Black Issues of Higher Education*, 1989, as well as Allen (1992), Garibaldi (1984), and others have suggested that students who attended HBCUs received psychological well-being and spiritual affinity while getting less favorable physical circumstances. According to the opinion of many of these educators, African American students on white campuses get a better physical environment and other amenities, such as library acquisition, computer facilities, and financial support, but lack the nurturing environment of an HBCU.

In line with these opinions, several African American educators expressed their views on why African American students attend HBCUs. When Dr. Cole was asked why he thought HBCUs were doing a better job educating African American students than their white counterparts, he replied, “They provide a supportive, nurturing environment. They want their students to succeed. Supporting African American students is ingrained in the culture of the institutions” (O’Brien, 1989). Another African American scholar, Dr. T. Robinson, who is credited with having conducted research into retention of African American students in HBCUs, agreed by saying that, on historically black campuses, “there is real attention given to the development of the human being to becoming a leader, to looking at who you are as a person and your responsibility to the society.”

**Retention**

Finally, the issue of retention in the higher education community has generated much interest throughout the country. The renewed focus on the persistence rate of
college students was spurred by the Federal Student Right-to-Know (SRK) and Campus Security Act of 1991, which required higher education institutions to publish data on the quality of their educational programs (Astin, 1997). This law, which required institutions to disclose information on completion or graduation rate, was expected to assist consumers—students, parents, and college counselors alike—to make informed decisions on which school to attend. It was also used for performance assessment and accountability across the United States.

Generally, substantial amounts of an institution's revenue come from state support, which amounts to 40.1 percent per full-time equivalent among public universities (Smith, Young, Bae, Choy, & Alsalam, 1997). With increased demands of stakeholders for institutions of higher learning to be more accountable, new ways to measure their performance and demonstrate to the taxpayers how public funds are utilized are becoming evident. In line with this development, in 1995, Act 459 of the Regular Legislative Sessions required that the Board of Regents of Louisiana prepare an annual higher education accountability report. Furthering the performance funding crusade, Louisiana joined other states like Florida, Tennessee, and South Carolina in passing into law in 1997 a second legislation, Act 1465, that incorporated performance based budgeting for all state agencies from which higher education is not insulated. The Act also stipulated that state institutions must produce a Five-Year Strategic Plan and an Operational Plan from which key objectives and indicators were developed for inclusion in the annual appropriations bill. Subsequent to that, Act 18 was passed the same year; it also changed funding for higher education to include
additional conditions aimed at performance evaluation and functional accountability (Board of Regents, 1999). What is now known as performance incentive funding became one of the centerpieces of the criteria to be used as a funding formula. Retention and graduation rates are among the key performance indicators (KPIs) adopted for judging institutions of higher learning in Louisiana.

Garibaldi (1989) tells us that the attrition rate of minority students enrolled in higher education has always been a major problem. Many other pieces of research literature indicate that the first few weeks of the freshman year are critical to determining whether a student will be a "stayer" or a "leaver" from an institution (Garibaldi, 1989, 1992; Noel, 1976; Noel, Levitz, & Saluri and Associates, 1987; Terenzini & Pascarella, 1977; Tinto, 1993). The retention of students seems to stabilize or does not decline at such a sharp rate after that period although there is some spillover to the entire year.

The behavior pattern of students with regard to persistence is due largely to the fact that the first few weeks of the freshman year is the time students face the problem of integration into their newly found community (Tinto, 1975, 1993). This is the time when the excitement of college can either be reinforced or ebb, depending on the accumulated feelings developed from the treatment or experiences students have had since arriving on the university campus. This situation may be a signal for the institution to implement a focused approach to identifying problem areas for the newcomers. In this regard, the importance of well-planned and implemented orientation programs, academic advisement, counseling, well-rooted mentoring...
programs, financial aid service that is hassle free, and other support service programs cannot be overemphasized. If these programs are well implemented in the beginning, they have been found to work for minorities across college campuses although their mode of implementation may differ slightly.

The aforementioned findings are inconclusive with regard to the effect that input, environment, and academic or non-academic variables have on the academic performance of college students. Although some results tend to support previous inquiries that the variables are good predictors of scholarship achievement, further study is still needed to confirm, negate, or refine the findings. Essentially, these studies serve as watersheds that trigger additional investigation into the grey areas of college student achievement that must be unraveled. Of even greater importance is the fact that most of the studies were conducted on white students and on white campuses with few focused on black students in HBCUs.

Notwithstanding the fact that the work of scholars previously cited make very significant contributions to the study of student performance and advancement in American colleges and universities, there is an obvious need to continue the research to obtain more certain and reliable conclusions. Most of the literature referenced above concentrates mainly on the theories, history, and concepts that surround student academic performance while others identify only a few of the factors that influence student performance. Another group of authors perform limited analyses that provide only basic descriptive statistics. Likewise, other investigators carried out their research using self-reported data, especially GPA, which was in most cases used as
the most important dependent variable in such works. This is obviously inadequate. Lastly, most of the studies were conducted on predominantly white institutions, thus virtually leaving out historically black institutions that could provide different data and conclusions.

These deficiencies are vital to the determination of the issue of the thoroughness of such studies. For instance, theories cannot be used in isolation without the actual observation of the true nature of given circumstances or empirical facts associated with them. Second, the studies that used only descriptive data cannot be considered to be exhaustive because of the nature of the limited information they provide. Descriptive data will provide basic information but cannot reveal the true significance and magnitude of differences that may exist among the variables under study. As such, it will provide only a simplistic approach to what may indeed be bigger than it is thought to be. On other occasions, advanced statistical analysis was utilized but with a weak variable. Self reported GPAs tend, in most cases, to be inflated thereby distorting the final result of the study. In order to avoid this situation, official GPAs are strongly recommended, when possible, for use in studies such as this.
CHAPTER 3

RESEARCH METHODOLOGY

This chapter is centered on the selection and gathering of quantitative and qualitative data used in the study. Specifically, it discusses the research design, sampling, variables of the study, operational definitions of variables, instrumentation, validity, and reliability of the instrument and data analyses.

The research was designed to shed light on the factors associated with the success of African American students at an historically black institution and to help answer the questions posed. Further, the study also provides suggestions to policy makers and educators on ways to better serve the students and provide grounds on which to expand and perhaps shape or alter support services that would promote student academic achievement at HBCUs. This study employs Astin's Input Environment and Outcome (I-E-O) model to the investigation of two specific outcomes (end of first-term grade point average and degree attainment) in order to evaluate the contributions of entering student characteristics and college experiences. This study aims at assessing the effects of both academic and nonacademic variables as well as those of the environmental setting (in and out of the classroom) on students' success. The study was designed as a systematic approach to studying the success factors associated with African American students at HBCUs.
Mixed Model/Method Study

The work of Maxwell (1996), who borrowed from his experience in the medical profession, was used here to reveal the emerging trend in research investigation which stresses the doctrine of the interconnectedness of research. His work, however, had been preceded by that of scholars such as Brewer and Hunter (1989) in Multimethod Research, Borg and Gall (1989), Patton (1990), and others. The multimethod approach advocates coupling of the quantitative and qualitative research methods. Qualitative methods allow the researcher to study selected issues in depth, while quantitative methods use standard measures or data with psychometric properties that fit into predetermined categories to which members are assigned. The aim of using both methods is to exploit the different strengths associated with both the quantitative and qualitative methods. By utilizing both methods, I have underscored the fact that the pragmatist approach is better than those of purists who argue that the two methods should not be combined. In the final analysis, the use of the two methods allowed triangulation of findings, thus providing powerful insight and a comprehensive view of what is observed (Caple, 1991; Patton, 1990; Tashkkori & Teddlie, 1998).

Research Objectives/Hypotheses/Research Questions

Objectives.

The overall objective was to identify the factors that influenced academic performance and ultimate success of students at an historically black institution as measured by the GPA and degree attainment of the students. The specific objectives
of the study were to show whether students' first-term GPA and degree completion were influenced by (1) students' race/ethnicity, gender, admission status (whether native or transfer student), ACT/SAT score, age, residency, housing arrangement, enrollment status, and retention, which are regarded as input, environmental, and intermediate outcome variables and by (2) student, faculty, and other personnel's perception of the factors which determine academic success. The following are the hypotheses and research questions developed for both the quantitative as well as qualitative phase of the study:

Hypotheses

1. The input predictors (gender, age, race, residency, admission status, and ACT score) and environmental variables (enrollment status and housing) will have a positive correlation with the GPA of freshmen.

2. The partial regression coefficients for each of the input predictors (gender, age, race, residency, admission status, and ACT score) and environmental variables (enrollment status and housing) will be positively related to first-term freshmen GPA of students at Southern University.

3. The length of time it takes to graduate will be positively related to the GPA, ACT, gender, race, enrollment status, age, and housing of students at Southern University Baton Rouge.

Research Questions

1. What factors contribute to the success of African American students at Southern University?

2. Does Southern University have a caring and nurturing environment conducive to learning?

3. What policies has SUBR put in place to create a nurturing and caring environment for its students?

4. What are inhibiting factors to African American students' success at an HBI, and how do the successful students overcome such barriers to their academic success?
The qualitative data used in this study concerned the impact of college experiences on academic performance and were collected from document analyses and interviews with 48 students who started college five years prior to being included in the study and interviews with 14 university personnel comprising faculty, deans, and other university personnel. The 48 students were selected from the Department of Sociology and the College of Education which was comprised of native and transfer students. These students were chosen because the College of Education is one of the oldest at SUBR. Students from the Department of Sociology were also considered appropriate due to the likelihood they possess the ability to describe the culture and environment imbued at the University. As stated above, I addressed four main questions and several subquestions related to these students' success in college as measured by their GPA. From the interviews conducted, I was able to compare responses across lines of gender, race, housing arrangement, and admission status.

The responses of students, faculty, deans, and university employees provided a means through which comparisons of the kind of environment existing at the University across race, department, and admission status can be made. The data generated from the interviews complemented the quantitative component of the study. The subsequent questions for the qualitative portion can be found in Appendixes D and E.

**Design of the Study**

Taking cues from the works of Brewer and Hunter (1989) and Patton (1990), which supported applying a multimethod approach to all stages of research, Tashakkori and Teddlie (1998) adopted and advocated the mixed model research. The
reasons for choosing mixed model studies, as an alternative to mixed method, were that they went beyond the mixing of methodologies. Rather, the mixed models suggested mixing the three major stages of the research process which were first identified by Patton (1990) and expanded upon by Tashakkori and Teddlie (1998), namely, (1) design: naturalistic inquiry or experimental design, especially the sampling strategy; (2) measurement: qualitative data or quantitative data; and (3) analysis: content analysis or statistical analysis. When these three dimensions are crossed, a mixed model design emerges.

For the purpose of this investigation, a mixed model, exploratory/confirmatory, quantitative dominant, and parallel style will be used -- Type VII (refer to Table 8.1 in Tashakkori & Teddlie, 1998, p. 151). See Figure 3.1 for graphical presentation of the study. The research design adopted is a method whereby the researcher conducts the qualitative and quantitative phases at the same time. Data for the study were also collected at the same time and analyzed in a complementary manner. In this study, the quantitative portion was the dominant one, while the qualitative part was aimed at relating or confirming the quantitative findings. The dominant nature of the quantitative portion was evident from the extensive research on college students in the past, which has been quantitative to a great extent. Both approaches generated numerical as well as narrative data that answered questions posed about the personal characteristics and experiences related to students' academic performance at an historically black institution.
Figure 3.1: The Methodological Phases of Academic Success of Students at a Predominantly Black Institution. Graphic Illustration of the Study. Mixed Model/Method, Parallel Design
The main focus of the study was to examine both data sources and students' GPA at the University and to determine the level of agreement between the two data sources regarding students' overall performance (Tashakkori & Teddlie, 1998). The analysis of the first-term GPA in relation to the variables included in the study revealed the performance of students at Southern University Baton Rouge through the application of the mixed method (quantitative and qualitative), thus strengthening the outcomes of the study. Hopefully, this will lead to a greater understanding of college students' performance, especially the understanding of African American students attending an historically black institution.

At the qualitative stage, case studies were ideal because they are particularly good for studying processes or change and development which are relevant to students in college. Patton (1990), Borg and Gall (1989), and Yin (1994) recommended this method for assessing perceptions, experiences, and actions that take place by determining human interactions, by talking to participants/informants, by listening, and through seeing the actors (participants) in action. Qualitative research design must be flexible and dynamic or interactive (Goetz & Lecompte, 1984; Marshall & Rossman, 1989; Maxwell, 1996; Patton, 1990; Yin, 1994). For the qualitative portion of this study, interviews and extensive review of documents were the main tools adopted to elicit information.
Quantitative Component

Sampling.

The criteria used for inclusion in the study were that the individuals must be Fall 1993 enrollees and freshmen students and stay for the duration of the semester. Data was obtained from the university's management information division. This has been made possible because of the acquisition of a new database system that maintains student information, known as the Student Information System (SIS). As a result of this development at the university, data at the student level is now available from the SIS. Students who withdrew from the university before the official last date set for withdrawal and who did not complete the semester due to illness, financial reasons, or inability to cope with the rigor of college work were excluded from the study. This step was taken so as to avoid biased data and to improve data reliability and validity.

The data revealed that 1,678, or 88 percent of native students remained at the school after 33 of them withdrew; among transfers, 192, or 10 percent, of the subjects (N=1,910) remained after 7 withdrew; 11 other students, considered outliers, were excluded completely because of insufficient information on them. This left 1,859 total subjects. Of this number, forty-eight percent (N=895) were males, ninety-five percent of them were African American (N=1,768), three percent were white, and two percent other; approximately eighty-nine percent were full-time students, and ninety percent were traditional (age 17-20 years old; average 18.4). A little over fifty-three percent of these students were commuter students while close to ninety percent of them were native students. The average GPA of the freshmen was 2.22.
By using the entire freshmen group, sampling error was reduced because large samples produce a smaller sampling error than a small sample. Another theory in support of this method is that a homogeneous population produces samples with smaller sampling errors than the heterogeneous population. Cohorts of this nature also allow for comparison of homogeneous groups by the possession of heterogenous qualities inherent in them. Thus, comparisons between native and transfer students, males and females, traditional and nontraditional students, etc. become possible to perform (Babbie, 1998; Tashakkori & Teddlie, 1998; Borg & Gall, 1989).

**Data Sources/Instrument/Measures.**

The data for the quantitative portion of the study came from student records at the University and the Board of Regents. From the (SIS) database maintained by the University, I obtained students' ACT scores, housing arrangements, end of term/semester (Fall 1993) GPAs, and admission status of first-time freshmen and transfer freshmen (those who spent no more than one semester in a previous school). In addition, from the Statewide Student Profile System (SSPS) maintained by the Louisiana Higher Education Governing Board, the Board of Regents, I obtained gender, enrollment status, residency of the students, age, and retention information. In order to determine time to degree completion, I used the Completers System database also maintained by the Board of Regents, five years after entry (1997/98 academic year). The data were then merged in order to have information about students' personal and institutional characteristics when they began college and other aspects relating to their experiences, specifically first semester performance, persistence behavior, and degree attainment pattern from college.
The different variables and data sources are listed in Table 3.1, a replica of Astin’s I-E-O model. Input variables included in this study are gender, age, race, residency, admission status, and ACT/SAT score. The environmental variables included in this study are two measures of students’ academic experiences or factors related to achievement in college: enrollment status and housing arrangement. Finally, one outcome measure, students' first-term GPA, was used to assess academic performance. Two additional variables, persistence and degree completion, referred to as bridge or intermediate variables by Astin, Tsui, and Avalos (1996), were included. Although these two variables may represent outcome rather than input or environmental variable, I nevertheless include them because I wanted to determine the relationship of these variables to the criterion variable. The variables included in this study were guided by research literature on students that has found institutional, personal, and student characteristics to influence the performance of college students.

Inferences to be drawn from this study should focus on students who possess characteristics similar to the students under study. Consequently, external validity or generalizability of the study findings is limited to students attending an historically black institution.

Data Analyses.

For the quantitative part of the study, several analyses were performed on the merged data. First and foremost, descriptive analysis were performed. Also, univariate analysis was performed to test for normality of data used in order to avoid
incorrect conclusions and biasing the effect that occurs in inferential statistics. For these reasons, experts recommend that researchers must first check their data for major departures from normality before performing more sophisticated analyses such as correlation, componential analysis, and regression (Hatcher & Stepanski. 1997; Norusis, M. J. & SPSS Inc., 1990).

Table 3.1: Variable Definitions and Coding Scheme

<table>
<thead>
<tr>
<th>Variables</th>
<th>Definitions and Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INPUT VARIABLES</strong></td>
<td></td>
</tr>
<tr>
<td>GENDER</td>
<td>Male = 1, Female = 2&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>AGE</td>
<td>16-59&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>RACE</td>
<td>Black = 1, White = 2&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>RESIDENCY</td>
<td>In-State = 1, Out-of-State = 2&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>ADMSTATUS</td>
<td>Native = 1, Transfer = 2&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>ACT SCORE</td>
<td>1-36 (SUBR, Fall 1993)</td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL VARIABLES</strong></td>
<td></td>
</tr>
<tr>
<td>ENRLSTATUS</td>
<td>Primarily Full-Time = 1, Part-Time = 2&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>HOUSING ARRGG</td>
<td>On-Campus = 1, Off-Campus = 2&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>INTERMEDIATE/OUTCOME VARIABLES</strong></td>
<td></td>
</tr>
<tr>
<td>FALL94RT</td>
<td>Stayer = 1, Leaver = 2&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>FALL95RT</td>
<td>Stayer = 1, Leaver = 2&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>FALL96RT</td>
<td>Stayer = 1, Leaver = 2&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>FALL97RT</td>
<td>Stayer = 1, Leaver = 2&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>DGCOMPLETE</td>
<td>1 to 5 years = 1, Not Graduated in 5 years = 2&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>OUTCOME/DEPENDENT VARIABLE</strong></td>
<td></td>
</tr>
<tr>
<td>FTSGPA</td>
<td>Student's end of term/semester Grade Point Average</td>
</tr>
<tr>
<td>(SUBR, Fall 1993)</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Obtained from the Board of Regent’s SSPS database Fall 1993-1997 academic years.

<sup>b</sup> Obtained from the Board of Regent’s Completers database 1995-1997 academic years.

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By performing this preliminary analysis, I was able to check for the assumptions of regression (normality and equality of variance, independence, and linearity). The initial steps aided in making valid inferences about the relationship of the variables in the population from which the sample was drawn. A battery of data diagnostics was conducted to further gain familiarity with the data. Second, descriptive statistics were utilized to describe and compare the attributes, experiences, and outcomes of students in the study among native and transfer students. Third, correlation coefficients were computed to determine relationships among the input, environment, and outcome variables. Fourth, I also explored the strength of the relationships between the independent variables (singularly or in combination) on the dependent variable by using multiple regression. Additional analyses performed were: The retention rate of all groups, the retention rate of native vs. transfer freshmen, male vs. female, traditional vs. nontraditional, etc., the graduation rate of the entire cohort, and the graduation rate of native vs. transfer, male vs. female, traditional vs. nontraditional, etc.

The hypotheses were tested using an alpha level of .05 unless otherwise indicated.

Internal Validity.

Since internal validity refers to the extent to which extraneous variables have been controlled, I took some important steps to guard against this threat. One such step was using official data. I also excluded some data that contained insufficient information. According to Astin (1991), as a rule a researcher should avoid using
subjects that are missing the criterion variable. Thus, all the students falling under this category were excluded in the correlation or regression analysis although they were accounted for in the calculation of the retention or graduation rate.

Attrition, or loss of subjects, is a significant threat to validity in a study such as this. The inclusion of students' persistence and graduation behavior necessitates that this issue must be discussed as part of the findings emanating from the study.

**External Validity.**

This concept is otherwise known as generalizability or representativeness of the experimental findings (Isaac & Michael, 1981). According to Snow (1984), experiments should be more representative of the actual environment to be generalizable to a similar population. In this regard, the study was generalizable to students under a similar educational setting. Specifically, this refers to students at HBCUs with similar characteristics.

**Qualitative Component**

**Sampling.**

For the qualitative method, a quota-purposive sampling was used. This sampling technique is known as disproportionate stratified random sampling in quantitative studies. The sampling technique made it possible to include students who had diverse opinions because of their varied backgrounds—admission status, gender, age, race, and so on. Twelve native and twelve transfer students (24 total) and twelve students who were highly successful and twelve who were not so successful (24 total) were selected — 48 students in all. A purposive sampling was taken of university
personnel which was comprised of two faculty members from the College of Education, one from the College of Engineering, one from the College of Business, and four from the college of Sciences—a total of eight faculty members. In addition, three deans, one from the College of Education, one from the College of Arts and Humanities, and one from the College of Sciences, as well as one Teacher of the Year to aid in within-campus comparison, were interviewed. Finally, among those interviewed were two top administrators, the Vice Chancellor for Student Affairs and a former Chief Academic Officer, who were found to possess thorough knowledge of the organizational culture of the institution. In total, fourteen university personnel were interviewed. Because this was a qualitative study, Lincoln and Guba (1985) recommend that at least twelve informants who are well selected should be used in interview research (p. 235). The criteria used for the successful student were that he or she had a GPA of 3.00 and above, and the not-so-successful, a GPA of 2.99 or less. Each interview lasted approximately 45 minutes.

**Data Sources/Instrument/Measures.**

For the qualitative phase, data were drawn from the field study (exploratory case study) I conducted which involved interviews and exhaustive analysis of documents relating to public records concerning students, faculty, and staff at the University, such as enrollment records, handbooks, newspapers, catalogues, factbooks, self-study reports, letters, calendars, and others (Whitt, 1991).

An interview guide (Patton, 1990) approach was used for this study because it was particularly suited for case studies. The interview guide provided for the use of a
list of questions that were to be asked of all participants during the course of the interview. By utilizing this guide, uniform information would be obtained from different people by covering the same issues. Another important reason for using this technique was that while focusing on a particular subject conversations arose which could be built upon provided they were related to the same topic. Time, which was always limited, was better managed with this approach. and interviewing many people became more systematic and comprehensive. Additionally, this technique was advantageous because it provided detailed information, depending on the extent to which the researcher was able to specify important issues relevant to his/her interest. The advantages associated with the interview guide, especially its flexibility, made it ideal for the study of college environment, which includes students, professors, deans, and staff personnel. Questions were already developed in order to communicate the same ideas to the interviewees so as to get honest responses to the questions. This interview technique also necessitated flexibility for the researcher to share some common bonds with the students and university employees during the interviews.

The questions, which were pilot-tested, allowed students to provide rich and relevant information of college life at SUBR, an HBI. The questions allowed the students to express their views in their own words on the following issues: (1) how the university environment has proven to be nurturing and conducive to learning; (2) their motivation, effort, and academic performance; (3) the obstacles they encountered and how they overcame those inhibiting factors, if any, during the course of attending the university; and (4) whether they could identify their motivation at the university in
light of their performance or the program/s or persons that have contributed to their development and academic achievement at the university.

The main instrument at this stage of the investigation was the investigator, who used a tape recorder and field notes. Complete questions to the informants can be found in Appendixes D and E.

**Data Analyses.**

As aforementioned, there have been few uses of qualitative study in higher education in the past, but its use has been encouraged lately by researchers (Crowson, 1987; Kuh & Andreas, 1991; Kuh et al., 1986; Kuh, 1981). The renewed interest in qualitative research has also been made possible because of the ability to analyze qualitative data which has previously been tedious and time consuming to perform in the past. Because qualitative studies produce a huge amount of data, researchers have been faced with the challenge of how to analyze them so that the result of the field work will not languish on the shelf. The work of Lincoln and Guba has opened an avenue for analyzing these data with minimum concern from the researcher by using a Constant Comparative Method through unitizing and categorizing of qualitative data.

Unitizing and categorizing are methods for analyzing qualitative data. As an indication of the strength of the constant comparative method approach, many computer programs for content analysis presently in the market such as Ethnograph, Nudist, and Atlas, have been developed as technological tools using the same principle employed by Lincoln and Guba in quantitizing qualitative data. Another benefit associated with their use is that it has been made possible for researchers to
obtain, for example, frequencies from qualitative materials and thus the possibility of quantifying qualitative data. Therefore, constant comparative methods by Glaser and Strauss (1967), and later Lincoln and Guba (1985) were used to analyze the qualitative data by unitizing and categorizing the huge amount of data into major topics/themes. This qualitative analysis technique involved five major steps: (1) identifying the big ideas; (2) unitizing the data; (3) categorizing the units; (4) negotiating categories; and (5) identifying themes and use of theory. The dominating concepts that emerged were then compared to each other in light of the research questions (Denzin. & Lincoln. 1994; Lederman, 1990; Lincoln & Guba, 1985; Merriam. 1998).

Validity and Reliability.

In dealing with the issues of validity and reliability in both research methods, Merriam (1998) and Lincoln and Guba (1981) explained that the researcher must be concerned with the validity and reliability of instrumentation, the appropriateness of data analysis techniques, the degree of relationship between conclusions drawn and the data that is utilized in the research, and so on. These principles are applicable to the qualitative researcher as well. For instance, in a qualitative case study, the investigator (instrument) must be well trained to be able to gather valid data, must see to it that the interviews are reliably and validly constructed, must make sure that the content of the documents is properly analyzed, and that the conclusions of the case study rest upon the data that were gathered during the process of conducting the research.
Although the approach used under both research methods may be different, as Firestone (1987) admitted, the quantitative and qualitative research paradigms yielded very similar results. As an illustration, the quantitative researcher, who has very little contact with those whom he or she studies, must communicate to the audience or readers the fact that processes have been followed faithfully. The qualitative investigator, however, must provide the reader with enough details to show that the author's conclusion makes sense. Furthermore, while quantitative studies portray a world of variables and static subjects about which the researcher knows very little and has no or minimal contact, qualitative studies describe people acting in events and in their natural environment (Merriam, 1998). Above all, triangulation also enhanced these aspects of the research since methodological triangulation (Patton, 1990) was employed in this multifaceted study.

**Trustworthiness**

Since the principles of qualitative research revolve around understanding and allowing the design to emerge by using a human instrument to study natural settings, and relying primarily on interviews with informants, its rigor is often challenged and scrutinized when compared to traditional standards of scientific credibility associated with quantitative studies (Crowson, 1987; Whitt, 1991). One of the reasons for such scrutiny and views held about this form of research is that the replicability usually done in quantitative studies to establish reliability is impossible to produce because of the context-boundedness of qualitative studies (Marshall & Rossman, 1989). It is also possible that the data gathered from respondents can be misleading because people are
likely to consciously or unconsciously present a good picture of themselves or the institutions they attend. Also, the complexities associated with colleges and universities, further complicate the attempt to accurately portray the reality in the manner that meets stakeholders’ satisfaction (Crowson, 1987; Whitt, 1991).

In order to overcome this problem of trustworthiness or credibility in qualitative research, Lincoln and Guba (1985) have offered standards for determining trustworthiness. Some of these are credibility (that the researcher’s interpretations are credible to the respondents), transferability (that the study may be useful in another context), dependability (that changes over time are taken into account), and confirmability (that the data can be confirmed by someone other than the researcher) (Lincoln & Guba, 1985).

**Credibility.**

This refers to the fact that conclusions arrived at are credible to the respondents. Standards for rigor should be set and must be followed by qualitative researchers to assure the credibility of their field work. In order to fulfill this condition, multiple steps were taken. These included triangulation, peer debriefing, and member checks. Triangulation is the technique for determining accuracy of data, which involves the use of multiple sources or multiple methods of data collection. In this study, methodological triangulation was adopted. Furthermore, data were obtained from four different sources and covered two different cohorts (native and transfer students) that have heterogenous qualities and are matched for purposes of comparison. In addition, three groups of respondents were involved in the interview.
The research method used involved both quantitative and qualitative methods, requiring different data sources, sampling, and analyses.

**Debriefing, or Member Checks with the Respondents.**

This is aimed at testing the data’s analytical categories, interpretations, and conclusions. The results of the interview conducted were shared with the respondents to determine that what was conveyed in the course of the interview was captured accurately. A consent form was signed and dated by both the interviewee and the interviewer after the respondents confirmed what was reported from the interviews. They also received a copy of their signed consent form and a copy of their interview to be included in the study.

**Transferability.**

This refers to whether the findings from the study can be used in another context, and it required the researcher to demonstrate the commonalities between the sending (the setting of the study) and receiving (the one to which the study may be applied) contexts. In this regard, the researcher must provide a thick description of the sending context so that someone else who wanted to embark on such research may assess similarity between the two and thus decide on the transferability of findings. The study was carefully conducted so that the setting, the findings and conclusions were thorough and accurate descriptions of the institution's organizational culture, keep in mind the confidentiality of the participants or informants (Lincoln & Guba, 1985; Patton, 1990; Whitt, 1991).
Dependability and Confirmability.

In order to meet this criterion, the researcher must keep and provide evidence of the appropriateness of the inquiry decisions made (Lincoln & Guba, 1985). The investigator must bear in mind possible changes over time in reporting results. This requirement was met by carefully designing the study and meeting the principles of research design, by being guided by good ethical conduct, especially in data collection and dissemination of the findings, and by avoiding “going native.” This criterion can also be established by means of an audit trail by which an external auditor may examine both the process and the products of the study (Lincoln & Guba, 1985). In the process of conducting this study, I compiled an audit trail which consisted of (1) raw data, including tapes, unedited interview notes, and documents; (2) a consent form, field notes, and relevant public documents; (3) all notes relating to category development; (4) process notes and methodological decisions; (5) materials about the demeanor of the investigator, notes on debriefings, and other correspondence relevant to this study; and (6) peer examination, which involved asking colleagues to comment on the findings as they emerged.

Setting

An historically black, public university provided the setting for the study. During the 1880s, many institutions of higher education sprang up which were both privately funded and state supported. Many black institutions were either established or obtained additional support at that time. For example, Southern University-Baton Rouge (SUBR) was founded on April 10, 1880 by the passage into law of the
legislative Act 87 of the Louisiana Legislature, which provided for the "education of the persons of color" in the state of Louisiana. On March 7, 1881, Southern University opened with twelve students. Initially, its purpose was to focus mainly on training teachers for black elementary and secondary schools. This is the reason why a curriculum that concentrated on education was its main focus for most of its early life (Southern University Catalogue, 1993-1995). Southern University has gradually expanded its curriculum from a vocational and agricultural institution to an institution that awards the highest degree possible, a doctorate, thus producing quality products (graduates) into the local economy. The University currently provides career opportunities in such programs as engineering, architecture, nursing, and business. Therefore, its purpose is to "prepare students who can compete favorably in their respective professions, and who are prepared to engage in advanced study in graduate and professional schools." It is also striving to become a major research university that is more involved with its immediate community and statewide educational system (SUBR, 1991).

Southern University is located in Baton Rouge on a scenic bluff overlooking the Mississippi River and occupies an estimated 512 acres of land along Scenic Highway and in north Baton Rouge. The population of Baton Rouge is approximately 500,000 people. The University is one of two institutions of higher learning that is state-supported and situated in the same city. The other institution in the city is Louisiana State University, the state's flagship university, which is located in the southern portion of the city. The location of both institutions makes it possible for the
students of either university to benefit by using libraries of their choice and cross-registering for classes by a method that allows credit towards the student's degree at the original institution.

**Institutional Characteristics**

During the Fall 1997 semester, a total of 9,490 students enrolled at Southern University, among them, 8,364 undergraduates. The institution's student body is characterized by what may be considered low-income earners because approximately 90 percent of the students are dependent on financial aid without which they would not be in school. An article published in the *Baton Rouge Advocate* on area Universities, while referring to one University official's position, stated that the university's mission is seen as serving mostly black, less affluent, and sometimes less well prepared students seeking a chance at a higher education (*Baton Rouge Advocate*, June 27, 1995). The University is also called “a home away from home” because of the “natural” mix of educational and social experiences present at the University, and many of the students come to the school because it is close to their hometowns and they can easily go home on weekends. Likewise, most students consider going to Southern University because of the tuition, which is relatively low compared to fees of other institutions in the entire southern region of the country. Southern's tuition, $2,068 for residents and $5,852 for non-residents for 1997 academic year, is low compared to many other public or private institutions in Louisiana such as the Louisiana State University Baton Rouge, where tuition in the same year was $2,711 for in-state students, and $6,311 for out-of-state students (*Chronicle*, October 16, 1998).
The total enrollment at Southern University averaged 10,000 from Fall 1993 to Fall 1997 with the Law School included. One important indicator of an institution's vitality is in the number of students who enroll at the college. The enrollment of 9,490 in 1997 showed an increase of approximately 4 percent over the 1993 enrollment of 9,166 (see institutional profile as illustrated in Figure 3.2). Imbued with the notion of providing a nurturing environment for its students, the number of its graduates increased from 1,123 in the 1993-1994 academic year, to 1,369 in the 1997-1998 academic period, according to its completers reports (Board of Regents' SSPS Report, 1994, 1998; Board of Regents' Completers Report, 1994, 1998).
### Profile of the University

<table>
<thead>
<tr>
<th></th>
<th>Fall 1993</th>
<th>Fall 1997</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students Data</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of Students</td>
<td>9,166</td>
<td>9,490</td>
<td>+324</td>
</tr>
<tr>
<td>Number of Undergraduate</td>
<td>8,300</td>
<td>8,364</td>
<td>+55</td>
</tr>
<tr>
<td>% Female</td>
<td>57.9</td>
<td>60.3</td>
<td>+2.4</td>
</tr>
<tr>
<td>% African American</td>
<td>93.2</td>
<td>95.1</td>
<td>+1.9</td>
</tr>
<tr>
<td>% White</td>
<td>7.9</td>
<td>3.1</td>
<td>-4.8</td>
</tr>
<tr>
<td>% Other</td>
<td>2.9</td>
<td>1.8</td>
<td>-1.1</td>
</tr>
<tr>
<td>% Part-Time</td>
<td>15.5</td>
<td>16.7</td>
<td>+1.2</td>
</tr>
<tr>
<td>% Students in Dev. Courses</td>
<td>65.0</td>
<td>40.6</td>
<td>-24.4</td>
</tr>
<tr>
<td>Average ACT Score</td>
<td>16.7</td>
<td>16.2</td>
<td>-0.5</td>
</tr>
<tr>
<td>Graduation Rate (6 years)</td>
<td>24.0</td>
<td>23.9</td>
<td>-0.1</td>
</tr>
<tr>
<td>Degrees Awarded</td>
<td>1,123</td>
<td>1,369</td>
<td>+246</td>
</tr>
</tbody>
</table>

| **Geographic Distribution of Students** |        |        |        |
| LA Residence          | 76.4    | 79.1    | +2.7   |
| Out-of-State          | 22.3    | 18.9    | -3.4   |
| International         | 1.3     | 2.0     | +0.7   |

| **Faculty** |        |        |        |
| Total Number of Faculty | 593     | 613     | +20    |
| % African American   | 75.2    | 66.1    | -9.1   |
| % White              | 13.3    | 21.0    | +7.7   |
| % Female             | 45.7    | 49.8    | +4.1   |
| % Holding Ph.D.s     | 45.7    | 58.6    | +12.9  |
| Faculty/Student Ratio | 1:20    | 1:21    | +1.1   |

| **Institutional Data** |        |        |        |
| Tuition (LA Resident) Undergraduate | $2,028 | $2,068 | +$40  |
| Tuition (Non-resident) Undergraduate | $3,950 | $5,852 | +$1,902 |
| % of Students on Financial Aid | 91.0    | 92.0    | +1.0   |
| Estimated Average Size of Financial Aid Package | $6,200 | $6,581 | +$381  |
| % Expenditure on Student Services | 5.9     | 6.7     | +0.8   |

**Figure 3.2: Institutional Profile of the University**


Note: Information excludes Law School with approximately 329 enrolled in Fall Semester 1993-1997.
CHAPTER 4

RESULTS AND DISCUSSION

This chapter will focus on the findings from the analyses of the data gathered from quantitative and qualitative sources by addressing the hypotheses and research questions proposed in Chapter Three. It is organized according to the stipulated plan of analyses and in the order of the hypotheses and research questions. Part One presents quantitative results: descriptive analyses, simple correlation, and multiple and logistic regression. Part Two focuses on the qualitative results from interviews and document analyses.

At the quantitative phase, two major types of analyses were used. First, simple descriptive statistics were utilized to describe the freshmen cohorts and to compare and contrast their performance on the basis of selected predictor variables. The variables selected for comparison have been frequently used in similar research. Therefore, I focused on the variables of GPA, ACT score, gender, race or ethnicity, age, residency, and admission status for purposes of comparison. Second, multivariate analyses that involved correlation and multiple and logistic regression were employed in order to determine the relationships among variables and the effects they had on the success of the student as they related to the student’s GPA and degree attainment.
Quantitative Findings

This section provides descriptive statistics: frequencies, means, standard deviations, and cross-sectional analyses of the dependent and independent variables to determine similarities and differences among the groups. Additional analyses conducted were correlation analysis and linear regression. Finally, a model for predicting probability of degree attainment in five years was developed by utilizing logistic regression.

Descriptive Statistics

My initial effort to determine the appropriateness of the variables through scatterplots, histograms, and other descriptive methods of analysis showed that the distribution was normal. The shape of the distribution which examined the normality of FTSGPA to the students' cohort indicated that it was symmetrical and bell shaped. This provided the green light for me to proceed with the analysis.

First-Term GPA

When the entire group was examined in aggregate according to gender, ethnicity, admission status, living arrangement, age, enrollment status, residence, and time to degree, females out-performed males with a GPA of 2.36 versus 2.06, and whites had higher GPAs than African Americans, 2.54 versus 2.21. When students' academic performance was examined according to admission status, native and transfer students performed about the same, 2.22 versus 2.24, although transfer students appeared to have a slight edge. Along age lines, traditional and nontraditional students had very similar grades, 2.22 versus 2.21, although younger students have a narrow edge over nontraditional students. If we observe the intensity with which the students go to school according to age, nontraditional students had a 2.29 GPA compared to the 2.27 GPA for traditional students.
Those who lived in the dormitory did better than their commuter counterparts, 2.32 versus 2.13. Equally relevant was the intensity with which students in the cohort attended college, which was represented by whether a student enrolled as a full-time or part-time student. The average GPA showed that those who registered as full-time students performed better than part-time students by a margin of 2.27 versus 1.82. The GPA of 1.82 is weak, and students with such grades are likely to be on probation. The performance of students according to their residency status indicated that in-state and out-of-state students had almost the same GPAs, 2.22 versus 2.20, but students from Louisiana held a slim edge. Of particular interest was the performance of those students who graduated within four years of study at the University. Those who finished in four years had higher GPAs than those who took longer to finish, 3.08 versus 2.18. Those who finished within five years had a GPA of 2.94 compared to 2.06 for those who took longer to graduate. Interestingly, among those who graduated in four years, males had a GPA of 3.21 versus 3.04 for females. This group, undoubtedly, were the superstars for the class of 1993 entrants (Table 4.1a-4.1i). But if we look at native students as a group, the reverse was the case, because females who finished in four years had a GPA of 3.17 versus 3.09 for males. For insight into the differences in the GPA of native students as a homogenous group according to these categories, consult Tables 4.2a-4.2i.

Examination of the first-year performance of the students in terms of academics revealed that 34.2 percent of the students had a GPAs of 1.99 or less. This group formed the core of students who were likely to be in academic difficulty, a first
indication of students who might be dropping out. They were, in popular diction, 
"potential leavers." Further observation showed that most students, 44.6 percent,
earned GPAs of 2.00 to 2.99 with approximately 24 percent of them obtaining a GPA
of 2.00 to 2.49. The remaining student group, 21.2 percent, received a grade of 3.00
or better during their first-term in college. Overall, the average GPA for the cohort
was 2.22, with a standard deviation of .90. More insights could be gleaned from
further examination of the tables provided by crosstabulation of the variables (see
Tables 4.1a-4.11).

Table 4.1a:
Analysis of First-Term GPA by Gender and Admission Status (Cohorts)
Fall 1993 GPAs as Indicator of Students' Performance

<table>
<thead>
<tr>
<th>Students' Gender</th>
<th>Admission Status</th>
<th>Native</th>
<th>Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Students</td>
<td></td>
<td>2.05</td>
<td>2.17</td>
</tr>
<tr>
<td>SD</td>
<td>.91</td>
<td>.91</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>802</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>Female Students</td>
<td></td>
<td>2.37</td>
<td>2.30</td>
</tr>
<tr>
<td>SD</td>
<td>.85</td>
<td>.98</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>851</td>
<td>95</td>
<td></td>
</tr>
</tbody>
</table>

Note: The GPA was the criterion variable and indicator of students' performance which range from 0.00 to 4.00 for the entire cohorts (Native & Transfer) contained in Tables 4.1a to 4.11. Due to missing data, the total number in the groups may differ.
### Table 4.1b:
Analysis of First-Term GPA by Gender and Housing (Cohorts)
Fall 1993 GPAs as Indicator of Students’ Performance

<table>
<thead>
<tr>
<th>Students’ Gender</th>
<th>Dormitory</th>
<th>Off-Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2.16</td>
<td>1.97</td>
</tr>
<tr>
<td>Students SD</td>
<td>.82</td>
<td>.96</td>
</tr>
<tr>
<td>n</td>
<td>396</td>
<td>484</td>
</tr>
<tr>
<td>Female</td>
<td>2.45</td>
<td>2.28</td>
</tr>
<tr>
<td>Students SD</td>
<td>.81</td>
<td>.92</td>
</tr>
<tr>
<td>n</td>
<td>470</td>
<td>477</td>
</tr>
</tbody>
</table>

### Table 4.1c:
Analysis of First-Term GPA by Gender and Age (Cohorts)
Fall 1993 GPAs as Indicator of Students’ Performance

<table>
<thead>
<tr>
<th>Students’ Gender</th>
<th>Age</th>
<th>16-20</th>
<th>21-59</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>2.07</td>
<td>1.93</td>
</tr>
<tr>
<td>Students SD</td>
<td></td>
<td>.90</td>
<td>.99</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td>807</td>
<td>73</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>2.35</td>
<td>2.48</td>
</tr>
<tr>
<td>Students SD</td>
<td></td>
<td>.86</td>
<td>.94</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td>868</td>
<td>79</td>
</tr>
</tbody>
</table>
### Table 4.1d:
Analysis of First-Term GPA by Enrollment Status and Age (Cohorts)
Fall 1993 GPAs as Indicator of Students' Performance

<table>
<thead>
<tr>
<th>Students' Status</th>
<th>Age</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>16-20</td>
<td>21-59</td>
</tr>
<tr>
<td>Full-Time</td>
<td></td>
<td>2.27</td>
<td>2.29</td>
</tr>
<tr>
<td>Students</td>
<td></td>
<td>.87</td>
<td>1.03</td>
</tr>
<tr>
<td>SD</td>
<td>1.512</td>
<td>1.10</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>1,512</td>
<td>110</td>
<td></td>
</tr>
<tr>
<td>Part-Time</td>
<td></td>
<td>1.78</td>
<td>2.00</td>
</tr>
<tr>
<td>Students</td>
<td></td>
<td>.98</td>
<td>.89</td>
</tr>
<tr>
<td>SD</td>
<td>163</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>163</td>
<td>42</td>
<td></td>
</tr>
</tbody>
</table>

### Table 4.1e:
Analysis of First-Term GPA by Gender and BS in Four Years (Cohorts)
Fall 1993 GPAs as Indicator of Students' Performance

<table>
<thead>
<tr>
<th>Students' Gender</th>
<th>Time to Graduation (Years)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Four Years</td>
<td>Did Not Graduate</td>
</tr>
<tr>
<td>Male Students</td>
<td></td>
<td>3.21</td>
<td>2.03</td>
</tr>
<tr>
<td>SD</td>
<td>.54</td>
<td>20</td>
<td>853</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Students</td>
<td></td>
<td>3.04</td>
<td>2.31</td>
</tr>
<tr>
<td>SD</td>
<td>.63</td>
<td>62</td>
<td>881</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.1f:
Analysis of First-Term GPA by Gender and BS in Five Years (Cohorts)
Fall 1993 GPAs as Indicator of Students’ Performance

<table>
<thead>
<tr>
<th>Students’ Gender</th>
<th>Time to Graduation (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Five Years</td>
</tr>
<tr>
<td>Male Students</td>
<td>3.02</td>
</tr>
<tr>
<td>SD</td>
<td>.50</td>
</tr>
<tr>
<td>n</td>
<td>107</td>
</tr>
<tr>
<td>Female Students</td>
<td>2.91</td>
</tr>
<tr>
<td>SD</td>
<td>.65</td>
</tr>
<tr>
<td>n</td>
<td>221</td>
</tr>
</tbody>
</table>

Table 4.1g:
Analysis of First-Term GPA by Gender and Race (Cohorts)
Fall 1993 GPAs as Indicator of Students’ Performance

<table>
<thead>
<tr>
<th>Students’ Gender</th>
<th>Race</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Black</td>
<td>White</td>
<td>White</td>
</tr>
<tr>
<td>Male Students</td>
<td>2.06</td>
<td>2.18</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>.90</td>
<td>.96</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>852</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Female Students</td>
<td>2.35</td>
<td>2.83</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>.87</td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>913</td>
<td>34</td>
<td></td>
</tr>
</tbody>
</table>
Table 4.1h:
Analysis of First-Term GPA by Gender and Enrollment Status (Cohorts)
Fall 1993 GPAs as Indicator of Students’ Performance

<table>
<thead>
<tr>
<th>Students’ Gender</th>
<th>Enrollment Status</th>
<th>Full - Time</th>
<th>Part - Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2.12</td>
<td>1.69</td>
</tr>
<tr>
<td>Male Students</td>
<td>SD</td>
<td>.88</td>
<td>.96</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>763</td>
<td>117</td>
</tr>
<tr>
<td>Female Students</td>
<td></td>
<td>2.40</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.85</td>
<td>.96</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>859</td>
<td>88</td>
</tr>
</tbody>
</table>

Table 4.1i:
Analysis of First-Term GPA by Gender and Residence (Cohorts)
Fall 1993 GPAs as Indicator of Students’ Performance

<table>
<thead>
<tr>
<th>Students’ Gender</th>
<th>State of Residence</th>
<th>Louisiana</th>
<th>Out-of-State</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2.05</td>
<td>2.09</td>
</tr>
<tr>
<td>Male Students</td>
<td>SD</td>
<td>.90</td>
<td>.93</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>610</td>
<td>270</td>
</tr>
<tr>
<td>Female Students</td>
<td></td>
<td>2.38</td>
<td>2.33</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.88</td>
<td>.85</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>713</td>
<td>233</td>
</tr>
</tbody>
</table>
### Table 4.1j:
Analysis of First-Term GPA by Admission Status and BS in Four Years (Cohorts)
Fall 1993 GPAs as Indicator of Students' Performance

<table>
<thead>
<tr>
<th>Students' Status</th>
<th>Time to Graduation (Years)</th>
<th>Four Years</th>
<th>Did Not Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Students</td>
<td>×</td>
<td>3.15</td>
<td>2.18</td>
</tr>
<tr>
<td>SD</td>
<td>.53</td>
<td>57</td>
<td>1,585</td>
</tr>
<tr>
<td>Transfer Students</td>
<td>×</td>
<td>2.91</td>
<td>2.12</td>
</tr>
<tr>
<td>SD</td>
<td>.75</td>
<td>25</td>
<td>148</td>
</tr>
</tbody>
</table>

### Table 4.1k:
Analysis of First-Term GPA by Admission Status and BS in Five Years (Cohorts)
Fall 1993 GPAs as Indicator of Students' Performance

<table>
<thead>
<tr>
<th>Students' Status</th>
<th>Time to Graduation (Years)</th>
<th>Five Years</th>
<th>Did Not Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Students</td>
<td>×</td>
<td>2.97</td>
<td>2.06</td>
</tr>
<tr>
<td>SD</td>
<td>.57</td>
<td>279</td>
<td>1,363</td>
</tr>
<tr>
<td>Transfer Students</td>
<td>×</td>
<td>2.77</td>
<td>2.03</td>
</tr>
<tr>
<td>SD</td>
<td>.79</td>
<td>49</td>
<td>124</td>
</tr>
</tbody>
</table>

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Table 4.11:  
Analysis of First-Term GPA for All Variables (Cohorts)  
Fall 1993 GPAs as Indicator of Students' Performance  

<table>
<thead>
<tr>
<th>All Categories</th>
<th>N</th>
<th>( \bar{x} )</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>1,827</td>
<td>2.22</td>
<td>.90</td>
</tr>
<tr>
<td>Male</td>
<td>880</td>
<td>2.06</td>
<td>.91</td>
</tr>
<tr>
<td>Female</td>
<td>947</td>
<td>2.36</td>
<td>.87</td>
</tr>
<tr>
<td>Black</td>
<td>1,765</td>
<td>2.21</td>
<td>.90</td>
</tr>
<tr>
<td>White</td>
<td>62</td>
<td>2.54</td>
<td>.98</td>
</tr>
<tr>
<td>Native Students</td>
<td>1,653</td>
<td>2.22</td>
<td>.89</td>
</tr>
<tr>
<td>Transfer Students</td>
<td>173</td>
<td>2.24</td>
<td>.95</td>
</tr>
<tr>
<td>Dormitory</td>
<td>866</td>
<td>2.32</td>
<td>.83</td>
</tr>
<tr>
<td>Off-Campus</td>
<td>961</td>
<td>2.13</td>
<td>.95</td>
</tr>
<tr>
<td>Full-Time</td>
<td>1,622</td>
<td>2.27</td>
<td>.88</td>
</tr>
<tr>
<td>Part-Time</td>
<td>205</td>
<td>1.82</td>
<td>.97</td>
</tr>
<tr>
<td>In-State</td>
<td>1,323</td>
<td>2.22</td>
<td>.90</td>
</tr>
<tr>
<td>Out-of-State</td>
<td>503</td>
<td>2.20</td>
<td>.90</td>
</tr>
<tr>
<td>16-20 year-olds</td>
<td>1,675</td>
<td>2.22</td>
<td>.89</td>
</tr>
<tr>
<td>21-59 year-olds</td>
<td>152</td>
<td>2.21</td>
<td>1.00</td>
</tr>
<tr>
<td>Grad, in Four Yrs.</td>
<td>82</td>
<td>3.08</td>
<td>.61</td>
</tr>
<tr>
<td>Did Not Graduate</td>
<td>1,734</td>
<td>2.18</td>
<td>.89</td>
</tr>
<tr>
<td>Grad, in Five Yrs.</td>
<td>328</td>
<td>2.94</td>
<td>.61</td>
</tr>
<tr>
<td>Did Not Graduate</td>
<td>1,488</td>
<td>2.06</td>
<td>.87</td>
</tr>
</tbody>
</table>

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### Table 4.2a:
**Analysis of First-Term GPA by Gender and Housing (Natives)**
**Fall 1993 GPAs as Indicator of Students' Performance**

<table>
<thead>
<tr>
<th>Students' Gender</th>
<th>Dormitory</th>
<th>Off-Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Students</td>
<td>2.16</td>
<td>1.96</td>
</tr>
<tr>
<td>SD</td>
<td>.82</td>
<td>.96</td>
</tr>
<tr>
<td>n</td>
<td>365</td>
<td>437</td>
</tr>
<tr>
<td>Female Students</td>
<td>2.44</td>
<td>2.31</td>
</tr>
<tr>
<td>SD</td>
<td>.82</td>
<td>.89</td>
</tr>
<tr>
<td>n</td>
<td>427</td>
<td>424</td>
</tr>
</tbody>
</table>

Note: The GPA was the criterion variable and indicator of students' performance which range from 0.00 to 4.00 for the group (Native) contained in Table 4.2a through Table 4.2i. Due to missing data, the total number in the groups may differ.

### Table 4.2b:
**Analysis of First-Term GPA by Gender and Age (Natives)**
**Fall 1993 GPAs as Indicator of Students' Performance**

<table>
<thead>
<tr>
<th>Students' Gender</th>
<th>16-20</th>
<th>21-59</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Students</td>
<td>2.06</td>
<td>1.91</td>
</tr>
<tr>
<td>SD</td>
<td>.90</td>
<td>1.00</td>
</tr>
<tr>
<td>n</td>
<td>747</td>
<td>55</td>
</tr>
<tr>
<td>Female Students</td>
<td>2.36</td>
<td>2.55</td>
</tr>
<tr>
<td>SD</td>
<td>.85</td>
<td>.87</td>
</tr>
<tr>
<td>n</td>
<td>805</td>
<td>46</td>
</tr>
</tbody>
</table>

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### Table 4.2c:
**Analysis of First-Term GPA by Enrollment Status and Age (Natives)**
**Fall 1993 GPAs as Indicator of Students’ Performance**

<table>
<thead>
<tr>
<th>Students’ Status</th>
<th>Age</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16-20</td>
<td>21-59</td>
<td></td>
</tr>
<tr>
<td>Full-Time</td>
<td>2.26</td>
<td>2.23</td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>.86</td>
<td>.99</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>1.413</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-Time</td>
<td>1.77</td>
<td>2.06</td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>139</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 4.2d:
**Analysis of First-Term GPA by Gender and BS in Four Years (Natives)**
**Fall 1993 GPAs as Indicator of Students’ Performance**

<table>
<thead>
<tr>
<th>Students’ Gender</th>
<th>Time to Graduation (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Four Years</td>
</tr>
<tr>
<td>Male Students</td>
<td>3.09</td>
</tr>
<tr>
<td>SD</td>
<td>.55</td>
</tr>
<tr>
<td>n</td>
<td>14</td>
</tr>
<tr>
<td>Female Students</td>
<td>3.17</td>
</tr>
<tr>
<td>SD</td>
<td>.53</td>
</tr>
<tr>
<td>n</td>
<td>43</td>
</tr>
</tbody>
</table>
### Table 4.2e:
Analysis of First-Term GPA by Gender and BS in Five Years (Natives)
Fall 1993 GPAs as Indicator of Students' Performance

<table>
<thead>
<tr>
<th>Students' Gender</th>
<th>Time to Graduation (Years)</th>
<th>Did Not Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Five Years</td>
<td></td>
</tr>
<tr>
<td>Male Students</td>
<td>2.98</td>
<td>1.93</td>
</tr>
<tr>
<td>SD</td>
<td>.49</td>
<td>.87</td>
</tr>
<tr>
<td>n</td>
<td>91</td>
<td>704</td>
</tr>
<tr>
<td>Female Students</td>
<td>2.97</td>
<td>2.20</td>
</tr>
<tr>
<td>SD</td>
<td>.60</td>
<td>.84</td>
</tr>
<tr>
<td>n</td>
<td>188</td>
<td>659</td>
</tr>
</tbody>
</table>

### Table 4.2f:
Analysis of First-Term GPA by Gender and Race (Natives)
Fall 1993 GPAs as Indicator of Students' Performance

<table>
<thead>
<tr>
<th>Students' Gender</th>
<th>Race</th>
<th>Black</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Students</td>
<td></td>
<td>2.04</td>
<td>2.18</td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td>.90</td>
<td>.96</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td>774</td>
<td>28</td>
</tr>
<tr>
<td>Female Students</td>
<td></td>
<td>2.36</td>
<td>2.74</td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td>.85</td>
<td>.95</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td>823</td>
<td>28</td>
</tr>
</tbody>
</table>
### Table 4.2g:
Analysis of First-Term GPA by Gender and Enrollment Status (Natives)
Fall 1993 GPAs as Indicator of Students' Performance

<table>
<thead>
<tr>
<th>Students' Gender</th>
<th>Enrollment Status</th>
<th>Full - Time</th>
<th>Part - Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Students</td>
<td></td>
<td>2.10</td>
<td>1.68</td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td>.88</td>
<td>1.01</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td>703</td>
<td>99</td>
</tr>
<tr>
<td>Female Students</td>
<td></td>
<td>2.40</td>
<td>2.03</td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td>.84</td>
<td>.94</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td>791</td>
<td>60</td>
</tr>
</tbody>
</table>

### Table 4.2h:
Analysis of First-Term GPA by Gender and Residence (Natives)
Fall 1993 GPAs as Indicator of Students' Performance

<table>
<thead>
<tr>
<th>Students' Gender</th>
<th>State of Residence</th>
<th>Louisiana</th>
<th>Out-of-State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Students</td>
<td></td>
<td>2.04</td>
<td>2.06</td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td>.90</td>
<td>.93</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td>568</td>
<td>234</td>
</tr>
<tr>
<td>Female Students</td>
<td></td>
<td>2.38</td>
<td>2.35</td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td>.87</td>
<td>.79</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td>661</td>
<td>190</td>
</tr>
</tbody>
</table>
Table 4.2i:
Analysis of First-Term GPA for All Variables (Natives)
Fall 1993 GPAs as Indicator of Students’ Performance

<table>
<thead>
<tr>
<th>All Categories</th>
<th>N</th>
<th>( \bar{x} )</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>1,654</td>
<td>2.22</td>
<td>.89</td>
</tr>
<tr>
<td>Male</td>
<td>802</td>
<td>2.05</td>
<td>.91</td>
</tr>
<tr>
<td>Female</td>
<td>851</td>
<td>2.37</td>
<td>.85</td>
</tr>
<tr>
<td>Black</td>
<td>1,597</td>
<td>2.21</td>
<td>.89</td>
</tr>
<tr>
<td>White</td>
<td>56</td>
<td>2.46</td>
<td>.99</td>
</tr>
<tr>
<td>Dormitory</td>
<td>792</td>
<td>2.31</td>
<td>.83</td>
</tr>
<tr>
<td>Off-Campus</td>
<td>862</td>
<td>2.13</td>
<td>.94</td>
</tr>
<tr>
<td>Full-Time</td>
<td>1,494</td>
<td>2.26</td>
<td>.87</td>
</tr>
<tr>
<td>Part-Time</td>
<td>159</td>
<td>1.81</td>
<td>1.00</td>
</tr>
<tr>
<td>In-State</td>
<td>1,229</td>
<td>2.23</td>
<td>.90</td>
</tr>
<tr>
<td>Out-of-State</td>
<td>424</td>
<td>2.19</td>
<td>.88</td>
</tr>
<tr>
<td>16-20 year-olds</td>
<td>1,552</td>
<td>2.22</td>
<td>.89</td>
</tr>
<tr>
<td>21-59 year-olds</td>
<td>101</td>
<td>2.20</td>
<td>.99</td>
</tr>
<tr>
<td>Grad. in Four Yrs.</td>
<td>57</td>
<td>3.15</td>
<td>.53</td>
</tr>
<tr>
<td>Did Not Graduate</td>
<td>1,585</td>
<td>2.18</td>
<td>.89</td>
</tr>
<tr>
<td>Grad. in Five Yrs.</td>
<td>279</td>
<td>2.97</td>
<td>.57</td>
</tr>
<tr>
<td>Did Not Graduate</td>
<td>1,363</td>
<td>2.06</td>
<td>.87</td>
</tr>
</tbody>
</table>

Retention Rates

The level of the commitment of the students to the degree program with reference to being full-time or part-time students was observed beginning from their first semester at the University. The freshmen students who participated in the study
as well as transfer freshmen were considered to be degree seeking. The 1993 school
catalogue was another measure used to examine the intensity of commitment and
continuity of the students from freshman year to their graduation. As expected,
students who enrolled as full-time degree seekers were more likely to complete their
degree within five years or less than those who enrolled fewer than full-time (Smith,
Young, Bae, Choy, & Alsalam, 1997).

However, if a student stopped or dropped out occasionally, this behavior
affected the overall persistence and prolonged the time needed for attainment of a
degree. Because most students at the institution were on financial aid, approximately
90 percent in any given semester, and because they had to be full-time students in
order to remain eligible for aid, the assumption can be made that most were full-time
students while in school and had the goal of obtaining a bachelor’s degree while
attending the University. Over a five-year period, the retention rate for this freshman
class was 62.2 percent for the second year, 48.5 percent the third year, 42 percent the
fourth year, and 32.5 percent by the fifth year for native students. Transfer students
consistently had a lower persistence rate when compared to their native student
counterparts, a finding which supports the study conducted in Kansas by JCCC (1992)
and by Pascarella and Terenzini (1991). This group of students had a 55.8 percent
retention rate for the sophomore year, 44.2 percent for the junior year, 36.7 percent
for the senior year, and 23.1 percent as graduating seniors, i.e., by the fifth year and
beyond (Table 4.3a-4.3b).
Table 4.3a:
Status of the 1,711 Native Freshman Students as of 1997-1998 Academic Year

<table>
<thead>
<tr>
<th>Sem./Year</th>
<th>Persisters</th>
<th>Percent</th>
<th>Graduated (BS)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 1993</td>
<td>1,711*</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fall 1994</td>
<td>1,065</td>
<td>62.2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fall 1995</td>
<td>829</td>
<td>48.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fall 1996</td>
<td>719</td>
<td>42.0</td>
<td>59</td>
<td>3.5</td>
</tr>
<tr>
<td>Fall 1997</td>
<td>556</td>
<td>32.5</td>
<td>226</td>
<td>13.2</td>
</tr>
</tbody>
</table>

* Total number of First-Time Freshman Students at start of study.

Table 4.3b:
Status of the 199 Transfer Freshman Students as of 1997-1998 Academic Year

<table>
<thead>
<tr>
<th>Sem./Year</th>
<th>Persisters</th>
<th>Percent</th>
<th>Graduated (BS)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 1993</td>
<td>199*</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fall 1994</td>
<td>111</td>
<td>55.8</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>Fall 1995</td>
<td>88</td>
<td>44.2</td>
<td>8</td>
<td>4.0</td>
</tr>
<tr>
<td>Fall 1996</td>
<td>73</td>
<td>36.7</td>
<td>18</td>
<td>9.1</td>
</tr>
<tr>
<td>Fall 1997</td>
<td>46</td>
<td>23.1</td>
<td>25</td>
<td>12.6</td>
</tr>
</tbody>
</table>

* Total number of Transfer Freshman Students at start of study.

To summarize, one year after matriculation at the University, nearly 38 percent (37.8) of the native students were lost since they did not return to school for the sophomore year. The proportion of dropouts by the sophomore year for the university was higher when compared to the 29 percent reported by the American
College Testing Service for the nation's public four-year colleges and universities (Geraghty, 1996). The trend continued as the number retained each year fell from 62.2 percent to 48.5 percent the third year, 42 percent by the fourth year, and to a low 32.5 percent the fifth year. It should be noted, however, that another retention study (Smith, 1999) revealed that after one year, the retention rate for African American students of participating institutions in the Consortium for Student Retention Data Exchange (CSRDE) was 68.5 percent.

My study shows that the dropout trend may be closer to Smith’s. The same was true in the retention rate’s slide among transfer students. In fact, a greater proportion of transfer students were lost because 44.2 percent failed to return to school the second year. Transfer students continued to have lower persistence rates throughout the period of the study. When compared to native students, transfer students consistently had less retention by as much as 6.4 percent in the sophomore year, and 4.3 percent at the junior year, 5.3 percent at the senior year, and as low as 9.4 percent the fifth year from 1994 to 1997 (Table 4.3a-4.3b). Perhaps the persistence behavior indicated that if colleges and universities (i.e., decision makers) invested resources early in students, more of them could be prevented from dropping out since the retention seemed to stabilize (or did not decline at such a sharp rate) as after the first year in college.

Graduation Rates

Typically, students seeking a bachelor's degree should graduate in four years or eight semesters. The curricula of universities are designed in such a way that
students may complete their degrees within that time frame. In keeping with that goal, four-year universities provide guideposts in their catalogue which spell out the number of credit hours students can take from one semester to the next in order to finish as expected. In all, a small number of students completed their degrees within four years of their matriculation at the University.

Approximately 4 percent (3.5) of the native students and 14.1 percent of those who transferred finished within four years. By the fifth year, 16.7 percent (cumulative) of native students (N = 1,711) had completed their degrees while 26.6 percent (cumulative) of transfer students had successfully finished their bachelor's degrees. The five year graduation rates of 16.7 percent for native students was lower compared to the 38-40 percent for liberal and open admission institutions, reported by the Consortium for Student Retention Data Exchange (CSRDE). It was also lower than the 57 percent released for four-year institutions by the National Center for Education Statistics (NCES) (Cuccaro-Alamin, 1997; Smith, 1999). We can go one step further by comparing SUBR’s graduation rates to other state institutions in Louisiana. In this regard, 14.3 percent of SUBR students graduated in five years or fewer. This data, although for a different freshman cohort, Fall 1990, nonetheless provided the basis for a benchmark. The 14.3 percent five year graduation rate was lower than at any other state institution in its rank. The University, according to the Southern Regional Education Board (SREB), is categorized as a Four-Year 3 institution (see Table 4.4c). However, there was a slight increase of 2.4 percentage points when compared to the 1993 freshman cohort under study’s five year graduation.
rate of 16.7 percent. Interestingly, 10 of the transfer students (N = 199) obtained their degrees in three years (Table 4.4a-c). Could it be that these students adjusted well to their new environment, or was there an error in classifying them as transfer freshmen? There was an indication that this may be the case because two transfer students graduated in two years. Another way of determining this possibility would be to ask the transfer students how many semesters they spent at the previous school and the number of credit hours accepted at Southern upon their transfer. These questions were addressed in the interview conducted at the qualitative stage of this investigation. Ten of the native students obtained associate degrees, and none obtained degrees among transfers. This was understandable in light of the fact that most students who transferred to the school aspired to have a bachelor’s degree.

The caveat is that once a student takes twelve hours per semester, he or she is considered full-time and remains on financial assistance, a very important reason for students to remain in school. Usually students take steps to protect their full-time status. Many may drop their classes and maintain the minimum credit hours just to be within the policy requirement and to avoid bad grades. Unless they return to take six hours or more during summer, they will inevitably fall short of the target hours to complete their studies in four years. From random selection of five majors and according to the University catalogue for this class, in order to graduate, students must take an average of 17 to 18 credit hours a semester. Consult Tables 4.4a-4.4b for detailed breakdowns of retention behavior and graduation rates.
Overall, 17.7 percent of the entire cohort had obtained their bachelor's degree by the fifth year, while 49.4 percent were still enrolled or indicated that they would continue their education by enrolling at least once between the Fall 1994 and 1997 academic years. On the other hand, 32.9 percent did not return to the University at all during this time frame. Among the students who did not return to the school, nearly 12 percent had a GPA of 2.00-4.00. This means that those students had good academic standing when they left the institution.

**Correlation and Regression Analyses**

At this phase of the investigation, simple correlation analysis, multiple regression, and lastly, logistic regression were performed, in that order. First, correlation coefficients were computed to assess the relationships between each of the input and environmental variables and the outcome variables. Second, the correlation coefficients were computed to determine the strength of the variables when all the variables were included at the same time to show the relationships between the input-environmental variables and their effects on the outcome variables. In order to perform these analyses, dichotomous variables coded 1, 2 were recoded as dummy or indicator variables (1=0, 2=0) as needed. Additional steps taken in preparation for the analyses involved deleting those observations with incomplete data for students who withdrew before the end of the semester in which the study started (Fall 1993 semester). Also deleted were all students except whites and African Americans.
Table 4.4a: Five Year Retention and Graduation Rates for Students at Southern University
First-Time Freshman Cohort

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>1993-97 First-Time Freshmen</th>
<th>Five Year Retention Rates</th>
<th>Five Year Graduation Rates (BS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st Year Raw Count (N=1,711)</td>
<td>Percent</td>
<td>After 1 Year</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>832</td>
<td>48.6</td>
<td>28.2</td>
</tr>
<tr>
<td>Female</td>
<td>879</td>
<td>51.4</td>
<td>34.0</td>
</tr>
<tr>
<td>Black:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>793</td>
<td>46.3</td>
<td>26.8</td>
</tr>
<tr>
<td>Female</td>
<td>842</td>
<td>49.2</td>
<td>32.6</td>
</tr>
<tr>
<td>White:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>30</td>
<td>1.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Female</td>
<td>29</td>
<td>1.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>10</td>
<td>0.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Female</td>
<td>7</td>
<td>0.4</td>
<td>0.2</td>
</tr>
</tbody>
</table>
Table 4.4b: Five Year Retention and Graduation Rates for Students at Southern University Transfer-Freshman Cohort

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>1993-97 TRANSFER FRESHMEN</th>
<th>FIVE YEAR RETENTION RATES</th>
<th>FIVE YEAR GRADUATION RATES (BS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1ST Year Raw Count (N=199)</td>
<td>Percent</td>
<td>After 1 Year</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>89</td>
<td>44.7</td>
<td>24.6</td>
</tr>
<tr>
<td>Female</td>
<td>110</td>
<td>55.3</td>
<td>31.2</td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>82</td>
<td>41.2</td>
<td>23.6</td>
</tr>
<tr>
<td>Female</td>
<td>96</td>
<td>48.2</td>
<td>27.6</td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Female</td>
<td>7</td>
<td>3.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>7</td>
<td>3.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Female</td>
<td>7</td>
<td>3.5</td>
<td>1.5</td>
</tr>
</tbody>
</table>
### Table 4.4c: Graduation Rates for Louisiana Public Universities and Colleges (Natives)
First-Time Freshmen Cohort

<table>
<thead>
<tr>
<th>SREB CLASSIFICATION</th>
<th>LOUISIANA PUBLIC INSTITUTIONS OF HIGHER EDUCATION</th>
<th>4th Year or less</th>
<th>5th Year</th>
<th>5th Year Cum.</th>
<th>6th Year</th>
<th>6th Year Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four-Year I</td>
<td>Louisiana State University and A &amp; M College</td>
<td>13.7</td>
<td>26.1</td>
<td>39.8</td>
<td>14.7</td>
<td>54.5</td>
</tr>
<tr>
<td></td>
<td>University of Louisiana at Lafayette</td>
<td>4.6</td>
<td>14.6</td>
<td>19.3</td>
<td>11.8</td>
<td>31.0</td>
</tr>
<tr>
<td></td>
<td>University of New Orleans</td>
<td>6.8</td>
<td>14.1</td>
<td>20.9</td>
<td>10.7</td>
<td>31.6</td>
</tr>
<tr>
<td>Four-Year II</td>
<td>Louisiana Tech University</td>
<td>16.1</td>
<td>18.4</td>
<td>34.6</td>
<td>9.4</td>
<td>44.0</td>
</tr>
<tr>
<td></td>
<td>Southern University and A &amp; M College</td>
<td>3.4</td>
<td>10.9</td>
<td>14.3</td>
<td>9.6</td>
<td>23.9</td>
</tr>
<tr>
<td></td>
<td>University of Louisiana at Monroe</td>
<td>6.6</td>
<td>14.6</td>
<td>21.2</td>
<td>12.0</td>
<td>33.2</td>
</tr>
<tr>
<td>Four-Year III</td>
<td>Grambling State University</td>
<td>7.3</td>
<td>13.9</td>
<td>21.2</td>
<td>10.0</td>
<td>31.2</td>
</tr>
<tr>
<td></td>
<td>McNeese State University</td>
<td>11.5</td>
<td>12.1</td>
<td>23.5</td>
<td>6.7</td>
<td>30.2</td>
</tr>
<tr>
<td></td>
<td>Northwestern State University</td>
<td>10.6</td>
<td>13.6</td>
<td>24.1</td>
<td>8.5</td>
<td>31.6</td>
</tr>
<tr>
<td></td>
<td>Southeastern Louisiana University</td>
<td>5.3</td>
<td>11.5</td>
<td>16.8</td>
<td>10.0</td>
<td>26.7</td>
</tr>
<tr>
<td>Four-Year IV</td>
<td>Louisiana State University at Shreveport</td>
<td>6.6</td>
<td>14.1</td>
<td>20.7</td>
<td>10.4</td>
<td>31.1</td>
</tr>
<tr>
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</tr>
<tr>
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<td>5.2</td>
<td>6.4</td>
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</tr>
<tr>
<td>Four-Year V</td>
<td>Delgado Community College</td>
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<td>3.4</td>
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<td>2.3</td>
<td>13.3</td>
</tr>
<tr>
<td></td>
<td>Elaine P. Nunez Community College</td>
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<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Louisiana State University at Alexandria</td>
<td>9.1</td>
<td>8.4</td>
<td>17.5</td>
<td>7.0</td>
<td>24.5</td>
</tr>
<tr>
<td></td>
<td>Louisiana State University at Eunice</td>
<td>21.0</td>
<td>7.2</td>
<td>28.2</td>
<td>7.5</td>
<td>35.6</td>
</tr>
<tr>
<td></td>
<td>Southern University at Shreveport/Bossier City</td>
<td>7.2</td>
<td>4.4</td>
<td>11.6</td>
<td>3.3</td>
<td>14.9</td>
</tr>
</tbody>
</table>

Note: Rates based on 1990 Freshmen who earned a degree between Spring 1995 and Summer 1996 from the institution of original entry, in Louisiana’s public institutions.

Note: "N/A" Not available

Source: Louisiana Board of Regents’ data report on graduation rates.
The reason for deleting race or ethnic groups other than whites and African Americans was mainly that those other groups were beyond the scope of the study. Prior to performing multiple regression, simple correlation analysis was considered advantageous for two reasons: (1) to explore relationships between a number of variables in a study and (2) to allow researchers to know how several variables, either independently or in combination, affect a behavior pattern, for example, "persistence behavior" as presented in this study.

The findings from the correlation analysis suggested that academic performance as represented by students' GPA during the first-term or semester at the University was related to ACT score, gender, race, age, housing arrangement, and persistence of students to graduate. Further examination of the correlation coefficient of the predictor variables of ACT score and enrollment status revealed that they were positively related to first-term GPA. Similarly, the first-term GPA was significantly correlated with the return of students to school year-to-year from Fall 1994 through Fall 1997, the fifth year. Likewise, the first-term GPA was significantly correlated with the likelihood of graduating within five years. As Table 4.5a-4.5b suggested, the students with higher GPAs during their first semester tended to be students who had done well on their ACT examination and the same group was likely to graduate within five years.

Enrollment status was also associated with the academic performance of students. Furthermore, it appeared that there existed an association between living on campus and academic performance. Additionally, there was an indication that living
on campus may determine the intensity with which the student pursued a bachelor's degree. This means that the likelihood of enrolling in school as a full-time or part-time student may be predicated on whether a student lives in a school dormitory or not.

The racial composition of the University was negatively correlated to the GPA and ACT score of the students: African American students had lower GPAs. It should be noted that although the ethnicity variable was significantly correlated with GPA at this stage, its contribution was very small. Additionally, a negative relationship between gender and GPA was revealed: male students had lower GPAs. The age of the students was negatively correlated with students’ ACT scores, ethnicity, housing, and admission status. This may be because older students tended to have weak ACT scores. Nontraditional, older students had lower ACT scores and white students attracted to the University tended to be older. Students who lived on campus were of traditional age. Those students who transferred tended to be older. It should also be noted that white students were not likely to live on campus. Correlation analysis revealed that the GPA and ACT score of students were two important predictors of academic success. Both variables are significantly associated with retention during the sophomore year; that is, after one year at the University. Additionally, living arrangements and enrollment status, as well as age and whether a student was from Louisiana or from other parts of the country, were significantly related to whether a student stayed in school or left. This pattern of association appeared to be the case from Fall 1994 through Fall 1997.
Table 4.5a:  
Correlation Matrix for Variables in Model (N=1,591) (Cohorts)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>8</th>
<th>9</th>
<th>10</th>
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<th>12</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FTSGPA</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>ACT</td>
<td>.306**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>RACE</td>
<td>-0.087**</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>GENDER</td>
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<td>-0.001</td>
<td>0.015</td>
<td>1.000</td>
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<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>5</td>
<td>HOUSING</td>
<td>0.076**</td>
<td>0.048*</td>
<td>0.022</td>
<td>-0.042</td>
<td>1.000</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>ADMIT ST.</td>
<td>-0.006</td>
<td>0.004</td>
<td>-0.009</td>
<td>-0.018</td>
<td>0.004</td>
<td>1.000</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>AGE</td>
<td>0.039</td>
<td>-0.077**</td>
<td>-0.071**</td>
<td>-0.008</td>
<td>-0.191**</td>
<td>-0.145**</td>
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<td></td>
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</tr>
<tr>
<td>8</td>
<td>RESIDENCY</td>
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<td>0.029</td>
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<td>-0.085**</td>
<td>-0.281**</td>
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</tr>
<tr>
<td>9</td>
<td>ENROLL ST.</td>
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<td>0.067**</td>
<td>-0.010</td>
<td>-0.058*</td>
<td>0.092**</td>
<td>0.102**</td>
<td>-0.127**</td>
<td>0.023</td>
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</tr>
<tr>
<td>10</td>
<td>PERSIST F94</td>
<td>0.391**</td>
<td>0.145**</td>
<td>-0.026</td>
<td>-0.059*</td>
<td>0.081**</td>
<td>0.103</td>
<td>-0.066**</td>
<td>0.060**</td>
<td>-0.138**</td>
<td>1.000</td>
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<td>-0.014</td>
<td>0.042</td>
<td>0.028</td>
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<td>0.090**</td>
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<td>0.555**</td>
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<td>0.000</td>
<td>-0.037</td>
<td>0.063*</td>
<td>0.138**</td>
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<td>0.057*</td>
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<td>-0.041</td>
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<td>-0.090**</td>
<td>0.075*</td>
<td>-0.009</td>
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<td>0.525**</td>
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</table>

*p < .05, ** p < .01, entire cohorts

Variable Labels:
1 FTSGPA
2 ACT SCORE
3 RACE
4 GENDER
5 HOUSING
6 ADMISSION STATUS
7 AGE
8 RESIDENCY
9 ENROLLMENT STATUS
10 PERSISTED FALL 94
11 PERSISTED FALL 95
12 PERSISTED FALL 96
13 PERSISTED FALL 97
14 GRADUATED WITHIN 5 YEARS
Table 4.5b:
Correlation Matrix for Variables in Model (N=1,508) (Natives)

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<td>-.037</td>
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<td></td>
</tr>
<tr>
<td>5</td>
<td>HOUSING</td>
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<td>.068**</td>
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<td>.016</td>
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</tr>
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<td></td>
<td>-.025</td>
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<td>.093**</td>
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<td>.121**</td>
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<td>.086**</td>
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<tr>
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<td>.159**</td>
<td>-.039</td>
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<td>.062*</td>
<td>.068**</td>
<td>NA</td>
<td>-.045*</td>
<td>.070**</td>
<td>.139**</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>PERSIST F95</td>
<td>.413**</td>
<td>.169**</td>
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<td>-.020</td>
<td>.043</td>
<td>NA</td>
<td>.065**</td>
<td>.102**</td>
<td>1.26**</td>
<td>.559**</td>
<td>1.000</td>
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<tr>
<td>12</td>
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<td>.205**</td>
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<td>.040</td>
<td>.045**</td>
<td>NA</td>
<td>.058**</td>
<td>.069**</td>
<td>.142**</td>
<td>.531**</td>
<td>.683**</td>
<td>1.000</td>
</tr>
<tr>
<td>13</td>
<td>PERSIST F97</td>
<td>.435**</td>
<td>.234**</td>
<td>-.018</td>
<td></td>
<td>.069**</td>
<td>.049*</td>
<td>NA</td>
<td>.070**</td>
<td>.084**</td>
<td>.159**</td>
<td>.504**</td>
<td>.640**</td>
<td>.798**</td>
</tr>
<tr>
<td>14</td>
<td>GDWS5YR</td>
<td>.330**</td>
<td>.217**</td>
<td>-.055*</td>
<td></td>
<td>-.098**</td>
<td>.075*</td>
<td>NA</td>
<td>-.037</td>
<td>.011</td>
<td>.110**</td>
<td>.293**</td>
<td>.406**</td>
<td>.455**</td>
</tr>
</tbody>
</table>

*p < .05, ** p < .01, native cohort

Variable Labels

1 FTSGPA 5 HOUSING 8 RESIDENCY 12 PERSISTED FALL 96
2 ACT SCORE 6 ADMISSION STATUS 9 ENROLLMENT STATUS 13 PERSISTED FALL 97
3 RACE 7 AGE 10 PERSISTED FALL 94 14 GRADUATED WITHIN 5 YRS.
4 GENDER 8 RESIDENCY 11 PERSISTED FALL 95
Finally, there existed an association between GPA, ACT score, and returning to school from year-to-year until attainment of a degree. This can be gleaned from the strong association shown between persistence of the students and graduation by the fifth year. This was evident from the high correlations recorded among them, .559, .683, .798, and .523 respectively (see Table 4.5b). There was also an indication that whether a student is from Louisiana or from out-of-state may have an influence on the student's persistence behavior. Students who were citizens of Louisiana were likely to persist in school. Note that from this point, admission status was excluded in the multiple regression analysis because it was found to be uncorrelated and insignificant to the academic performance of the students at the institution. Similar studies have also excluded transfer students in order to avoid bias in findings.

Regression Analyses

Multiple linear regression analysis technique is favored in relationship and prediction studies because of its sophistication, versatility, and precision. By utilizing this technique, it was possible to determine the strength and predict the effects of the input and environmental variables of ACT score, gender, admission status, ethnicity, age, residency and housing arrangements, and enrollment status on the success of students as represented by the first-term GPA. This can be determined by employing the partial correlation coefficients for each of the input-environmental variables. The findings from bivariate analysis of GPA with each of the predictors revealed that ACT was the most important in regard to academic success with a 0.321 correlation coefficient and $R^2$ of 0.103.
In addition, the multiple regression analysis of the five independent input variables (ACT score, gender, ethnicity, age, and residency) and the two environmental variables (housing arrangement and enrollment status) utilized in this study showed that ACT, gender, enrollment status, age, and housing arrangement, in that order, significantly influenced academic success from the position of the strength of the effects of these variables on GPA. The two variables that indicated otherwise were ethnicity and residence, i.e., whether a student was from Louisiana or from out-of-state. When all the predictors were included in a single model, the explained variance was 0.146, or 14.6 percent. If we examined the standardized coefficients, ACT score was the strongest predictor with a coefficient of 0.303. This was followed in importance by gender, -0.145 in a regression model of this historically black university (see Table 4.6 for details). The t values associated with the predictor variables with a value greater than 1.96 also revealed the significance of the various predictor variables on the outcome variable. Collectively, the multiple correlation that included both input and environmental variables was 0.382 and $R^2$ at 0.146. This implies that all the original seven variables considered accounted for 14.6 percent of the variance in first-term GPA, and the relationship is significant.

If we explored this further by including the persistence behavior of students, we would see a very interesting result. The correlation coefficient of 0.922 for Fall 1994, in a bivariate analysis between GPA and Fall 1994 for students who returned after one year, also showed a multiple correlation of 0.497 and $R^2$ of 0.247. This result proved to be the strongest of the variables associated with the success of the
students. By including the one-year retention alone with the original seven predictors in a single equation, \( R^2 \) jumped from 0.146 to 0.324 (or 32.4%). This implied that persistence of the students after one year alone contributed 17.8 percent to the explained variance of that total (32.4%), which was quite strong. When we included the remaining three years, \( R^2 \) rose to 0.347, or 34.7 percent, meaning that the proportion contributed was only 2.3 percent after the first year of persistence behavior. This may prove to be one of the most striking findings in studying the academic success of students at this historically black university. First-year persistence made a greater contribution (17.8%) to the explained variance than was reported for the remaining three years combined (2.3%). This indicated that early intervention programs, support services provided, a nurturing environment, and interaction with the faculty would have a greater impact on students' success during this period than later during the undergraduate years. This was also further justification for the selective admissions policy planned to take off in Fall 2001 at the University.

Often, a stepwise regression is used in studies such as this in order to confirm further the initial findings and to develop a model. In this study, stepwise regression was utilized with .05 probability of F for a variable to be entered and .10 probability of F to remove a variable from a model. Among the principal variables, those that met this criterion for inclusion were ACT score, gender, enrollment status, age, and housing arrangement, in that order, while ethnicity and the residence of students did not.
Table 4.6: Regression Results of Predictor Analysis on First-Term GPA (Natives)

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE</th>
<th>Beta</th>
<th>T</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
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<td>-0.085</td>
<td>0.007</td>
<td>0.303</td>
<td>12.678</td>
<td>0.000**</td>
</tr>
<tr>
<td>Race: Black</td>
<td>-0.158</td>
<td>0.121</td>
<td>-0.030</td>
<td>-1.305</td>
<td>0.192</td>
</tr>
<tr>
<td>Gender: Male</td>
<td>-0.257</td>
<td>0.041</td>
<td>-0.145</td>
<td>-6.187</td>
<td>0.000**</td>
</tr>
<tr>
<td>EnrollSt: Full-Time</td>
<td>0.306</td>
<td>0.074</td>
<td>0.098</td>
<td>4.157</td>
<td>0.000**</td>
</tr>
<tr>
<td>Age</td>
<td>-0.026</td>
<td>0.009</td>
<td>0.070</td>
<td>2.959</td>
<td>0.003*</td>
</tr>
<tr>
<td>Residency: LA</td>
<td>-0.012</td>
<td>0.050</td>
<td>0.006</td>
<td>0.232</td>
<td>0.816</td>
</tr>
<tr>
<td>Housing: Dormitory</td>
<td>0.124</td>
<td>0.044</td>
<td>0.070</td>
<td>2.840</td>
<td>0.005*</td>
</tr>
</tbody>
</table>

R = 0.382

R² = 0.146

* p < .05  **p < .001

Each of these variables was revealed to be significant, judging from the partial regression coefficient associated with each variable after controlling for the effects of other variables. It should be noted again that the values of partial correlation coefficients clearly showed that the ACT score was the strongest determinant of first-term GPA; it accounted for 10.3 percent of the variation in first-term GPA among the principal variables. This supported the initial finding while multiple regression analysis was performed.

If we performed the same analysis by including the year-to-year persistence behavior, Fall 1994 persistence would enter first with R² 0.227, or 22.7 percent, and would be immediately followed by Fall 1997. Given this result, it is important to know the order in which the entire variables entered, which was as follows: (1) Fall
1994, (2) Fall 1997, (3) ACT score, (4) gender, (5) age, (6) Fall 1995, and (7)
housing arrangement. This recorded a total explained variance of 34.4 percent, which
was strong when we included the persistence behavior of the students in the same
equation. Again, the second-year persistence came first once year-to-year persistence
behavior was introduced in the same equation along with the main variables used in
the study. Evidently, the R² of 22.7 percent for students who stayed in school after
the first year indicated that second year retention had the strongest association to the
first-term GPA.

**Predicting Retention at an Historically Black Institution**

To provide further illumination on the factors that may lead to success in
college, the time-to-degree completion within five years could be used as the
dependent variable to predict retention. The important factor in such prediction is to
use retention as a yardstick for determining institutional performance and
effectiveness. Such practice enables the institution to compare the actual outcomes
with expected measures based on the variables employed. One may ask, “Why use
graduation rate for such prediction?” The logic or principle behind using graduation
rates for predicting retention is that institutions that are successful in retaining their
students should have degree completion rates that are higher than their anticipated or
expected rates. On the other hand, institutions that are not as effective in retaining
their students would be expected to have degree completion rates that are far below
their anticipated rates, while those institutions considered to be average in their
production of graduates should have anticipated and actual rates that are similar

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(Astin, Tsui, & Avalos, 1996; Astin, 1997; JBHE, 1997; Mortenson, 1997; Saupe, Smith, & Xin, 1999; Tinto, 1993). Astin et al. (1996, p. 23) suggested that when the difference between both rates exceeds ± .10, "we are approaching a discrepancy which could be viewed as significant from both a practical as well as statistical perspective."

Because the dependent variable adopted for the purpose of prediction was a categorical variable (graduated within 5 years = 1 and not graduated = 0), logistic regression was considered the ideal analytical technique. Apart from being designed specifically for use with dichotomous dependent variables, it has been credited for accuracy in predicting given phenomenon (Menard, 1995). In addition, its similarity to linear regression by providing a constant term and a regression coefficient for each predictor made for ease of use. By employing this analytical technique, the coefficients of the predictors along with the scores associated with the specific variable in a single model, as well as the constant term, can be used in an equation to predict the probability of being in a specific group, i.e., the probability, for instance, of completing a degree within five years.

In the process of predicting retention, focus was on native students only because graduation rates traditionally are calculated by using students who start and finish their college career at the original school of entry, according to the Student Right to Know and Campus Security Act. Prediction was done by substituting the values of the independent variable/s into an estimated regression equation. On this basis, retention rate would be predicted by the GPA, ACT, gender, enrollment status,
age, housing arrangement, and ethnicity of students, excluding the residency and admission status. Other characteristics of entering freshmen that may be included in this kind of study are HSGPA, SES, and mother’s education (refer to literature review contained in Chapter Two of this study and Astin, 1997, p. 649). It is highly recommended that only variables that are significantly associated with student success should be used in the predictions. Although five variables were initially shown through multiple regression analyses to be significantly correlated with GPA, the major variable at the onset of this investigation, I have also included the ethnicity of the students in order to facilitate comparison along racial lines. The GPA, which was no longer the dependent variable at this stage, was added.

Although seven formulae for calculating predictions are provided, two were used for illustration in this study. For instance, Table 4.7 shows the combination for predicting retention and degree attainment within five years. Attempts to use a stringent measure of four years failed to yield results because logistic regression could not load subjects that were less than 50 (a measure that may be more applicable to highly selective institutions). Again, it should be noted that only native students were used in the prediction because including transfer students with first-time freshmen was strongly discouraged.

In order to estimate the likelihood of students who earn a GPA of 3.00 or better in the first semester of their freshman year completing a degree within five years, the first formula would be presented as follows:
Probability of completing a degree in five years:

\[ a + b(\text{FTSGPA}) \]

\[ \logit(\text{GDW5YR}) = -6.3159 + 1.8331(3.00) \]

As demonstrated above, Table 4.7 provides the result of a bivariate logistic regression analysis with only one predictor, first-term GPA, that generated a logit of \( (\text{GDW5YR}) = -6.3159 + 1.8331(3.00) \). Since students with a GPA of 3.00 and greater are considered successful in this study, and in view of its positive correlation to other good predictors of academic success, this value was included by multiplying it by the regression coefficient. In order to calculate the probability of success, meaning students who finish in five years, the results of the calculation (-.8166) were put in the exponential formula \( e^{-8166}/(1 + e^{-8166}) = .3065 \), where \( e \) was the base of the natural logarithms. This means that the probability of students with a GPA of 3.00 and greater obtaining their degree in five years was 30.7% for the sample of freshmen at the University. The process for interpreting the logistic regression in models with multiple predictors was the same. For example, the equation for determining the relationship between completing a degree in five years and three predictors (FTSGPA, ACT, and being a MALE) was:

\[ \logit(\text{GDW5YR}) = -7.6541 + 1.6291 (3.00) + .0951 (21) + .4622 (1) = -.3075 \]

It is noteworthy that the method for calculating was the same, except for the inclusion of gender which is coded 1 for male.
Table 4.7: Predicting Bachelor's Degree within 5 Years Using Different Combinations of Input and Environmental Variables (N=1,643)

<table>
<thead>
<tr>
<th>Input and Environmental Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTSGPA</td>
<td>1.8331</td>
<td>1.6778</td>
<td>1.6291</td>
<td>1.6491</td>
<td>1.6823</td>
<td>1.6802</td>
<td>1.6814</td>
</tr>
<tr>
<td>ACT</td>
<td>0.0921</td>
<td>0.0951</td>
<td>0.0887</td>
<td>0.0802</td>
<td>0.0799</td>
<td>0.0806</td>
<td></td>
</tr>
<tr>
<td>GENDER: Male</td>
<td>0.4622</td>
<td>0.4492</td>
<td>0.4460</td>
<td>0.4447</td>
<td>0.4448</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENROLL ST: Full-Time</td>
<td>-2.4977</td>
<td>-2.3068</td>
<td>-2.2933</td>
<td>-2.2975</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>-0.0768</td>
<td>-0.0738</td>
<td>-0.0728</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOUSING: Dormitory</td>
<td>-0.0809</td>
<td>-0.0797</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RACE: Black</td>
<td>-0.0986</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Constant (a)                     | -6.3159 | -7.4574 | -7.6541 | -7.5202 | -6.0687 | -6.0712 | -6.1035 |

R^2                               | 0.292   | 0.308   | 0.316   | 0.334   | 0.338   | 0.338   | 0.338   |

Degree Completed = 1 to 5 Years = 1; not graduated = 0.

1 FTSGPA                           5 AGE
2 ACT SCORE                        6 HOUSING
3 GENDER                           7 RACE
4 ENROLLMENT STATUS
The ACT score of 21 and GPA of 3.00 were criteria, or predetermined conditions, set for my evaluation and gender (male) that must also be recognized in the interpretation.

This provided a probability of graduating in five years:

\[ \frac{e^{-3.075}}{1 + e^{-3.075}} = 0.4237 \text{ or } 42.4\% \]

If we compared these findings with the actual graduation rates of students with a GPA of 3.00 in their freshman year or better for this class with about 43.2 percent of students who completed their degrees in five years, we could conclude that the retention strategies at the University were effective. The actual percentage of graduates (43.2 percent) was about 12.5 percent over the anticipated rate. For the second equation, the actual proportion of those who graduated was 53.1 percent compared to the 42.4 percent predicted. On the basis of these results, it can be determined that when we evaluated the anticipated and actual five-year graduation rate for the University, it was in excess of 10.7 percent against the anticipated rate. Therefore, it can be concluded again that the University was effective in retaining students who earned a 3.00+ in the first semester of their freshman year. This finding supports another study by Mortenson (1997) which suggested that HBCUs, due to their nurturing and caring environment, were effective in retaining their African American students. This result may prove to be by far the most important outcome of this investigation, for it can be used for justification of the University's continued existence and for enhancing the stature of HBCUs' contribution to the nation and the need for more support from government and supporters of higher education. However, special attention must be given to institutional factors of
selectivity, residence arrangement, size of the institution, and major concentration as well as facilities existing at the institution which may affect degree completion and may sway the result either positively or negatively when similar studies are performed.

Qualitative Findings

The purpose of this study was to investigate input and environmental characteristics which contribute to students' success at a predominantly black institution. Toward this end, a mixed method approach which allowed comprehensive examination of the varied experiences students have at the institution was adopted. For the qualitative study, a case study which involved interviews and content analysis was used. The qualitative approach sought to address the following questions:

1. What factors contribute to the success of African American students at Southern University?
2. Does Southern University have a caring and nurturing environment conducive to learning?
3. What policies has SUBR put in place to create a nurturing and caring environment for its students?
4. What are inhibiting factors to African American students’ success at an HBI and how do the successful students overcome such barriers to their academic success?

As in other studies, much of the qualitative data for the case study was obtained through conducting experience interviews (Merriam, 1998; Patton, 1990).
In addition, content data were gathered from analysis of internal and external documents pertaining to the institution. In the final analysis, information obtained was used for triangulation purposes with the quantitative findings.

**Context Analysis**

Several scholars (Astin, 1968; Chaffee & Tierney, 1988; Pascarella & Terenzini, 1991; Tierney, 1988) have attempted to provide answers to the question of what constitutes an atmosphere conducive for learning. The scholars have suggested that environmental factors that afford University clientele the opportunity to maximize persistence and educational achievement include peer culture and the promoting of on-campus friendships between students and professors, other socializing activities, and especially the perception that the college is caring and highly concerned about the individual student. Other contributing factors include the college's emphasis on supportive services, such as advising, orientation, and individualized general education courses that develop academic survival skills.

The university in this case study has been recognized in the academic community and around the country for being a caring institution, concerned and nurturing to its most cherished assets, students. To borrow ideas from marketers, the positioning of the university as offering a very "caring," "nurturing environment" that is "warm and homey" was considered a catalyst for its becoming a pull agent to those students who chose to go to the institution. Positioning is defined as the perception that target consumers have of a firm's (institution's) or organization's offerings relative to competitors'. It is often the most critical element in a firm's marketing
strategy (image) because it defines the perception the firm (institution) intends the consumers (stakeholders) to have of its product or service (Engel, Warshaw, & Kinnear, 1994).

The consequence of its positive image is that SUBR has become one of the largest black universities in the nation. The growth experienced by the University could not have been simply because it is close to home. Other reasons may be due to the university's mission, affordability, and the positive impression that past and present students have of the institution, for example. According to marketers, "Nothing sells better than mouth strap." This means that such impressions, which can be lasting, will be passed along to friends and family members and may influence and encourage others who desire a college education to seek to attend such an institution that their relatives or friends have enjoyed.

The impression that the clientele of Southern University have about the school can be supported with a statement made by the former Chancellor of SUBR, Dr. Yates, in Fall 1995: "We think the students are our best recruiters because they go out and tell other young people about experiences they are having here and encourage them to enroll here, too." He also referred to the positive image and climate of the University which have been cultivated over the years as reasons that students come to the school from all sections of the country (Baton Rouge Advocate, October 18, 1995).

Lastly, other environmental effects that center on psychosocial change can influence student learning. For example, decreases in authoritarianism and increases in general psychological adjustment and maturity appear to be greater on campuses
where there is emphasis on intrinsic motivations and student involvement in classroom
discussions and course decision making, including involvement with faculty in the
academic community (Pascarella & Terenzini, 1991).

**Content Analysis**

In order to address the questions in the qualitative phase, the following
documents were analyzed: The Self-Study document completed for reaccreditation; the
University’s mission and vision statement, strategic plan documents, student and local
newspaper and press releases; publications for students and prospective students
including catalogues, newsletters, fact books; the Statewide Student Profile Report
and Completers Report produced by the state Board of Regents; ACT student profile
reports; and other University-wide studies conducted between the 1993 through 1997
academic year. The results of these analyses are discussed below.

An analysis of the environment data indicated that between 1993 and 1997
enrollment increased at SUBR from 9,166 to 9,490 by 324, an increase of 3.5
percentage points when we exclude the law center. The majority of the students are
female (60.3 percent in 1997). However, the proportion of white students on the
campus declined from 3.9 percent in 1993 to 3.1 percent five years later while those
of African Americans increased by about 2 percent. During that same period, the
enrollment of other students including Hispanics and international students declined
from 2.9 percent to 1.8 percent. Ethnicity figures reveal the struggle of the
University to increase diversity on its campus by attracting students other than African
Americans. The law center, which has continued to attract a large number of white
students, is so far the only success story in this regard. Approximately 33 percent of students enrolled at the law school in 1997 were white. The desegregation settlement agreement which established the Baton Rouge Community College (BRCC) in the same city as well as scholarships dedicated for recruiting white students who attend historically black institutions in the state are part of the effort that has been made to boost diversity on these campuses. However, this effort has been handicapped because no provision for scholarships was made specifically for this purpose at the undergraduate level to attract white students. The only funds earmarked for recruiting white students in the desegregation plan were for hiring a white recruiter at the University for the purpose of recruiting white students.

The University has developed some new programs which have contributed to broadening students' choice of majors. This is expected to increase the applicant pool and ultimately its market share by attracting more students. Since the last reaffirmation by the Southern Association for Colleges and Schools (SACS) in 1991, the University has added new programs while strengthening existing ones through program review and gaining recognition for existing ones through periodic accreditation and reaccreditation with national and regional accreditation agencies. Most notably, new degrees are being offered at the graduate school level. Among newly added or proposed programs are master's degrees in Physics and Nursing as well as doctorates in public policy, urban forestry, toxicology, maths, and biological sciences. Since 1991, many of the existing programs also gained accreditation or reaccreditation, with 83 percent of programs eligible for accreditation getting
accredited by 1997. These developments have led to a rise in student enrollment at the graduate school level from 9.4 percent in 1993 to 11.9 in 1997, a 2.5 percentage point increase.

By Fall 1997, its mission had not changed. However, the adoption of the selective admissions policy to be implemented in 2001 is expected to introduce changes. The decision to go selective was a means to find new ways of achieving the fundamental mission or goal of the university, and in the end selective admissions may positively affect the composition of the student body during the twenty-first century (Babaoye, 1996; Dyer, 1996). In many of its internal and external documents, the University stated its mission as follows:

Southern is a multi-purpose university that seeks to prepare students who can compete favorably in their respective professions and who are prepared to engage in advanced study in graduate schools. The University ensures that its graduates are broadly educated and prepared for life-long learning to meet the changing demands of society through liberal education.

In addition, its statement of purpose contained in the 1991 self-study document reads:

To achieve this goal, the University provides quality academic programs and services to meet the diverse needs of all students. As a publicly supported, coeducational, open-admission institution, the University accepts the challenge of providing education for students with heterogeneous abilities and varying academic backgrounds.

In furtherance of the mission of the university, the internal document produced by the former Chancellor, Dr. Marvin Yates, in 1992 known as the Twelve-Point Plan, emphasized the goal of providing excellent education under the slogan of “A people’s institution serving the state, the nation, and the world for over 100 years”
(SUBR, 1991, p. 16; SUBR, 1992). As part of the self-study document, the university explicitly stated that as an extension of its goals, programs that were supportive and conducive to learning were its objective. To this end, the University identified programs that would facilitate attainment of its purpose (providing an environment conducive to the intellectual, emotional, and aesthetic enlargement of the lives of all its students), such as open admissions, the honors college, developmental programs, continuing education, strengthening historically black college and university programs, Reserve Officers Training Corps (ROTC), and the center for international development. These multiple approaches were aimed at producing an outcome that would put the University in the top tier among liberal arts colleges.

The examination of additional documents revealed that fewer of the entering freshmen at Southern were taking developmental courses. The percentage of students required to take developmental courses fell by 24.4 percent in 1997, although the average ACT score of the freshmen who enrolled at the University fell by about one percentage point the same year, while the six-year graduation rates in 1997 were about the same as five years ago, 24 percent. In 1993, 8.2 percent of undergraduate students who matriculated at the University were without a declared major and five years later, 9.3 of its students were not committed to a major. The diversity of the student body has also declined. In the past, the University attracted a sizeable number of out-of-state students, thus increasing the capacity and richness of student experiences which Astin (1993b) suggested was the most important influence on growth and development during the undergraduate years. The likely reason for the
decline was the increase in fees for out-of-state students; these went up by about 22 percent in the 1997 academic year alone.

One of the most important, but underutilized qualitative measures of institutional outcome and effectiveness is students' satisfaction with their college experiences. Information obtained from an internal report on graduating students indicated that students had great academic experiences at the University. Most graduates were very satisfied with their academic programs, judging by a response rate of 79.1 percent in the Fall of 1994. According to the graduates, 72.5 percent were satisfied with class scheduling; this happens to be the general pattern across the academic year (refer to report for comparison with previous semesters). Most graduates were satisfied with the opportunity to explore occupational plans at the University. The respondents also revealed a better than average (71.1 percent) satisfaction level with the library services.

Additionally, the graduates were highly satisfied with their academic experience and the knowledge acquired in their chosen fields at Southern. Among the participants, 94.5 percent expressed their satisfaction in this regard. Specifically, the question item which solicited their opinion on how much Southern University has helped them reach their goal of increased knowledge in an academic field showed that graduates were very satisfied as indicated above.

Another important aspect of the University observed in this survey of graduates was that an overwhelming majority of students (87 percent) believed that SU helped them in preparing for their careers. The graduates recorded another solid good
impression of the University by helping them reach their goal with a 90 percent satisfaction rating on this item. Other areas of the University that received very high ratings in student experience were the University’s ability in making them learn specific skills capable of enriching their lives and skills to for helping them to get along with people. Both factors were important to students' career success after they had earned their degrees. These items elicited responses of more than 82 percent.

Equally important were the items that pertained to student instruction and learning at the University. The participants expressed their overall impressions of courses in their major on a very high note. About 91 percent of the respondents were very impressed with this aspect, while 89.2 percent were impressed with the quality of instruction and 82.9 percent with the accessibility of instruction. In regards to the placement office, 40.6 percent of the students perceived the office as doing a good job although 34 percent of students did not attempt to use the office. This high number perhaps was due to students' inadequate knowledge of the important role played by the office in helping students secure employment upon graduation. The students' mouthpiece for communicating with its population, *The Digest*, also generated a good satisfaction rating of 62.2 percent (SUBR, 1995).

The quality of education in an institution is closely linked to the quality of its faculty. One of the most important strengths of Southern university is the diversity of its faculty, which is 66.1 percent African Americans, and 21 percent white. In fact, the proportion of whites in the professorial rank increased by 7.7 percent in Fall 1997 compared to five years ago. Furthermore, approximately 59 percent of the faculty
hold Ph.D.s. Another important advantage for attending HBCUs is their small size which fosters an individualized learning environment. The faculty student ratio (1:21) remained virtually unchanged over five years (Figure 3.2). The share of expenditure devoted to provision of student support services increased by nearly 1 percent.

In spite of these positive developments and changes that have been taking place at the institution, there are indications that the administrative apparatus is plagued with problems. For instance, some internal studies, memoranda, and news items released about the university reveal the deficiencies confronting the University. Ironically, the administrative sector, which should be the conduit and facilitator in the efficient operation of the University in order to achieve institutional effectiveness, is confronted with myriad problems.

Results from analysis of graduating students’ surveys are used once more. Some very important service areas of the University did not receive positive response ratings when compared to other areas earlier identified. The financial aid office elicited only 30 percent satisfaction in the Fall 1997; 51.1 percent in the same semester did not perceive the office as satisfactory although approximately 90 percent of the students at the University are on financial aid. The number of students dissatisfied with the registration procedure was also higher than the number of those who approved of it; 76.4 percent in the Fall of 1994 were dissatisfied. Thus, only 21.6 percent were satisfied with the registration process. Other areas with negative showings were the student union, which was under construction and still closed at the time the questions were administered, campus police, and food service.
Criteria for Interviews

When I arrived in Baton Rouge fifteen years ago, I came to attend Southern University Baton Rouge because my childhood friend with whom I grew up was already a student there. The University was one of the American universities approved by the Department of Education in Nigeria and recognized as a reputable institution. There were many Nigerian students attending the University for similar reasons at the time. The low tuition also made it attractive to many students before the fees went up suddenly, leading to an exodus of Nigerians and other foreign students to other sections of the country. My brother, who was then at Ohio University at Athens, Ohio, also supported the idea of my going to SUBR because of the subtropical weather and the "sense of blackness." It was beyond my wildest dream that I would later be in a position to work for the University as an institutional researcher and planner, not to mention having the skill to perform research on it. This opportunity has made it possible for me to be thoroughly immersed in the college culture, having been there from 1984 to 1991 as a student, and then as a full time employee up to the present (2000). By virtue of my association with the University within these time frames, I have fulfilled the criteria for prolonged engagement that Lincoln and Guba (1985, p. 301) recommend for increasing the probability of reliable findings.

Interviews are an essential source of case study evidence. For example, this investigation of college environment, as with many other case studies, centers on human affairs and, in this instance, on the SUBR students. This is why interviews

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have been incorporated as an integral part of this investigation that could be corroborated with other data. Another important reason for interviewing was to obtain rich data detailed and complete enough to provide a full and revealing picture of what was going on. In interview studies, data generally require verbatim transcripts of the interviews, rather than simply notes on what was noticed or on what was felt to be significant (Maxwell, 1996).

Having conducted a content analysis study on the college environment at Southern University, I opted to extend my inquiry further by using the interview technique to determine what was not revealed in the content analysis. This avenue made it possible for me to know the feelings, the thoughts, and the intentions of the students, faculty, staff, dean, and administrators on the culture entrenched at the institution. It also enabled me to determine the true perception of these stakeholders, which is very vital in qualitative research. Above all, the follow-up of content analysis study with interviews made it possible for me to perform triangulation of the results, thereby reconciling similar findings and pinpointing where differences existed. By so doing, the validity and reliability of the information gathered during the process of the inquiry were increased.

**Problems Related to Method**

At this juncture, it is important to acknowledge some design problems encountered during the investigation before presenting the findings from the qualitative analysis. Incidentally, unlike quantitative studies, changes in research approaches employed are permissible in qualitative investigations. In fact, such
changes should be anticipated in qualitative studies because of the interactive and
dynamic nature of naturalistic research (Maxwell, 1996; Patton, 1990) which can be
dictated by what the investigator experienced in the field. The conditions that
necessitated some of the changes in this study, especially sampling strategy, were time
limitations, limited resources in terms of the cost that would be involved in reaching
the graduates or former students of the University, and change in the political
atmosphere existing at the University.

These limitations caused me to change my sampling strategy to a quota-purposive
sampling at the student level. Sample subjects were from students in the College of
Education and Department of Sociology, who were mainly seniors during the Spring
2000 semester. Because of the time constraint, another 10-item questions survey was
developed to request demographic information so that I could determine that those
selected have similar characteristics to my original sample (see Appendix H). Those
included in the sample of 48 students could be considered to possess a wealth of
knowledge about the University. A proportionate number of 12 native and 12 transfer
students (24) and 12 students who were highly successful (GPA of 3.00 and above)
and 12 who were not so successful (GPA of 2.99 or less) were selected -- 48 students
total. The sample subjects shared the same characteristics as originally planned. By
using this group of students, Tashakkori and Teddlie (1998) suggested transferability
of results as a likely option when a researcher is faced with this circumstance. For the
university personnel interviews, fourteen 14 were selected instead of the 16 originally
planned. This sample size is considered adequate, according to Lincoln and Guba
(1985), without sacrificing the quality of the information gathered.
Besides limited resources, there were some other drawbacks associated with this inquiry. Generalization of findings may be limited because of the scope of coverage. Studies such as this should last a whole year, according to Chaffee and Tierney (1988), who advocated that cultural research of colleges and universities required that the researcher study at least one academic year in order to see a full season of the units of analysis. The interviews for this study were conducted during the Spring semester only. One other weakness is that students who left the University were difficult to find; however, the findings from these interviews, including the one conducted on the university personnel, contributed sufficient information about the perspectives of students, deans, faculty, and staff on the state of the culture at the institution for the purpose of this study. The results of the interviews can be used as an impetus for conducting further studies on the college environment and student experiences at this or other universities.

**Interviews Analysis**

Focus is now shifted to the interviews conducted, which present the perceptions of mostly seniors and students who graduated (64.6 percent) regarding their college experiences and the perception of the university by the faculty and staff alike in their own words. According to Spradley (1980), interviewing informants depends on a cluster of interpersonal skills. These skills include asking questions, listening instead of talking, taking a precise rather than assertive role, expressing verbal interest in the other person, and showing interest by eye contact and other non-verbal means.
Likewise, Spradley recommended five requirements for selecting a good informant: thorough enculturation, current involvement, an unfamiliar cultural scene, adequate time, and a nonanalytic mode. These conditions, laid down as essential ingredients for good interviews, were taken into account before embarking on the interview of the stakeholders at SUBR campus.

The interviews conducted in this multiple units embedded case study and which involved the Vice Chancellor, deans, the students, and faculty were centered on the "caring," "nurturing," and "individualized" environment that the University claimed was created for the students. According to Yin (1984) and Patton (1990), three basic types of interviews are appropriate: (1) the open ended nature interview (which in essence includes face-to-face and specifically simple guide interview, as was used in this case); (2) the focused interview (conversational manner interview), and (3) the formal survey (such as standard forced open-ended interviews).

**Interviews with University Personnel**

In order to have a good picture of the environment at the University campus, 3 deans 1 vice chancellor, 1 former vice chancellor, and 9 professors were included in the interviewing process. They were considered an important part of this investigation because they were closer to the students and could provide valuable information about the culture existing at the University. Questions to the professors were kept at a moderate level (10 questions) and were used to support the case study by inquiring about the description of their reasons for teaching at SUBR, what they perceived as the role of the professor other than teaching, the level of their interaction
with their students, what they knew about policies on creating nurturing environment, and how they assessed the success or failure of those policies. Those involved were carefully selected, having been recommended by respected figures at the University and by the investigator's knowledge of participants at the University.

Question one: “What factors contribute to the success of African American students at Southern University?” To address this question from the perspective of the University personnel, qualitative data from the interview conducted were examined. The evidence supplied by the study participants, who were made up of vice chancellors, deans, and faculty members, showed that they considered study habits the number one factor that contributed to the success of African American students at SU. Of the 14 university employees interviewed, study habits was identified 7 times as a contributing factor. Other factors identified were family background and high school preparation, mentioned 5 times; peer group and interaction with faculty, mentioned 3 times; financial aid and the facilities available at the University, 3 times, and quality teaching, mentioned 1 time. One of the interviewees summed up the success factors by saying:

The most important thing that contributes to their success is first, diligence: students who go to class regularly, follow instruction, and buy textbooks at the beginning of the semester. This discipline makes it possible to succeed no matter their level of preparedness. Second is study habits: seeking available assistance in [the] form of using the computer lab and tutorial session. Three [is] getting [into] a study group and regular conferences with the faculty and advisors. This will ascertain that you are on the right track in your program. I guarantee you that if a student follows these steps once admitted to the university, he/she can manage through the university and graduate.
The factors mentioned above which contributed to the success of the students at the University were buttressed by another faculty member who expressed the following point of view:

Precollege preparation is important anywhere. This applies across the board. Two, quality of teaching. This means courses taught, scope, depth, and appropriate feedback, which means homework and quizzes which are up to standard. Those who don’t make the grade don’t get the grade, period. Therefore, those who are less prepared will be able to shoot for it. When you mention these standards, students will rise to the task. The third factor is the financial support and other resources to do this thing in the case of minority students. They must have money to buy books. Resources, financial support, and systemic mentoring are all important [factors] which allow [for] self actualization for students and for superior learning.

If we put this into proper context, the first interviewee implicitly said that in spite of the open admissions policy (standing policy at the time of this investigation) and the associated deficiencies that the students had before being admitted into the University, if the students demonstrated diligence and applied themselves to their studies, the students would succeed, their scores on the ACT test notwithstanding. The second interviewee, on the other hand, reaffirmed the importance of college preparation which is determined by the ACT score.

Closely connected to the aforementioned facts was the level of commitment and dedication demonstrated by the faculty and the genuine interest the faculty members have in their students. Eight of those interviewed had been working at the University for over 20 years. Their commitment to the students was revealed when they were asked why they chose to work at SU. Seven of them wanted to give back to the
community because they felt the need to help African American students. According to these informants, this explained why they were working at the historically black institution. This strong commitment fostered a caring and nurturing environment which they promoted through their daily interaction with the students. This could be found in the opinion expressed by another faculty member who was asked about the role of the teacher aside from teaching:

We are to help develop the minds of the students, energize them, and make them reach their potentials. I have also been able to locate jobs for them after they graduate. As teachers here, we take on many roles as mentor, confidant, and sometimes serve as parents.

Although the University personnel by their expression clearly showed they truly cared, they were also quick to add that quality teaching, research, and service were the centerpieces of their profession. This can be supported by how another interviewee perceived the role of the professor at the University:

It is high quality teaching that is up to the standard and is externally defined. Two, original research to produce new knowledge in publishing, which includes journal articles. Three, grantmanship, because in a free enterprise society, it takes money to maintain programs. Four, systemic mentoring so that the classroom is supplemented with experiential learning. Five, professional and educational services rendered to the public at large. To my knowledge, these are the pillars of what a professor should be about.

One factor which affects student success at HBCUs is the level of students’ interaction with peers and their professors. Practically all of the interviews responded to promoting close relationships that convinced the students that they did care. They did this through an open-door policy, informal sessions, advising students on
academic matters and, if needed, their personal problems, finding financial resources, and a host of other ways. These were all means of getting close to the students. They also added that they did this without jeopardizing academic quality. Suggesting one of the various ways of making students achieve, one interviewee remarked on the following:

Well, my interaction with the students is both formal and informal. Formally, I am to prepare the syllabus that meets standard of accreditation requirements. Informally, I realize that I teach humans, and they may not always be in a state of mind to perform as expected. So, I share my ups and downs with them with the hope that that will make them achieve and make them do what they are supposed to do and excel in what they are here for.

The University personnel were asked to tell the effect on student life of the variables of gender, admission status, ethnicity, age, and performance of students and how these variables have affected their academic success. Eight (8) University employees did not think there were any differences in student life and academic performance due to gender, while 5 of the employees felt that females were more successful than males, and 1 indicated “Don’t know.” Some of those who said that they did not notice any difference also indicated that they had not taken a closer look at this possibility. Within this same group were those who felt that females were performing with as much ability as males in engineering and the sciences. This is why the number of those who felt there was no difference in student performance between males and females was high; however, those who acknowledged that differences existed expressed the strong view that females were outperforming males.

In order to corroborate this view, I quote the opinion of another professor:
When I first came to SU, most students in advanced chemistry were males. Now most of the students are females. In the past, from my observation, male students outperformed female students. Now, it is just the opposite; female students are outperforming male students. Over the past ten years, all our top students in chemistry have been female students. The academic performance is based on where one has his/her mind. Male students nowadays are not interested in excelling or getting an education, it seems.

On the question of whether the admission status of students affected performance, 3 participants said there was no difference. Five (5) did not know because, according to the participants, it was difficult to distinguish between native and transfer students, while an equal number of respondents 3 said one group was more successful than the other.

When students’ performances were compared on the basis of their ethnicity, 6 of the respondents said there was no difference in degree of success, 3 of the respondents indicated “Don’t know,” and 4 perceived white students as doing better than their African American counterparts.

The increasing number of nontraditional students on college campuses has brought into focus the desire by University administrators to demand data that will assist them in making informed decisions on how to meet the needs of the growing number of this group of students. Seven (7) felt that nontraditional students were more successful in their studies, 4 sided with traditional, and the other 3 respondents said they did not know. The fact that older students performed better could be supported by a statement made by another interviewee:
Nontraditional students by virtue of age tend to be mature intellectually. They tend to take academics preparation more seriously on the average than traditional students. Nontraditional students will often be married. Therefore, their lifestyle is usually different from the typical student. They are not as academically prepared as traditional students although they may get the most out of college because of their preparation. Nontraditional students may not get the most out of extracurricular activities of the University.

The reason frequently mentioned for the greater level of success among nontraditional students was their maturity although there was an indication that the better showing of nontraditional students may have depended upon their major or on the subject that they were taking during a particular semester. For example, mathematics and biology professors felt that traditional students were better while nontraditional students tended to have difficulty in those subject areas.

Question two: “Does Southern University have a caring and nurturing environment conducive to learning?” Clearly, SUBR has a caring and nurturing environment. This could be deduced from what the respondents considered normal or routine while imparting knowledge to their students on the SU campus. They achieved this in a variety of ways—through having an open-door policy, being approachable and less intimidating to the students, making students comfortable, etc. To do otherwise was impossible because of the culture existing at the institution. In the words of another interviewee:

If I am not available to the students, if I do not treat them with respect and appreciate them, I will be an outcast here. Although it is an unspoken thing, [...] we all know that here. I think that individual discretion emphasized this in our minds to prepare them (students) for the world they will operate in.
Question three: "What policies has SUBR put in place to create a nurturing and caring environment for its students?" It was surprising to find that 8 of those interviewed were either not sure or unaware of any policy that the University had created specifically for this purpose. Three (3), however, identified facilities such as computers, laboratories, and the Student Union as examples of these policies. Two (2) interviewees identified mentoring, 1 referred to placement, and the other 1 mentioned mandatory office hours. One would have expected some policies such as advisement, mentoring, orientation, placement, technology, etc., to come to the minds of the participants and emerge as frequently mentioned. Perhaps the reason this was not the case is the implicit nature of caring and nurturing on the HBCU campuses. On the other hand, there was an indication that none of the policies identified have been universally adopted by the University community. This indication can be found in a statement made by one of the interviewees:

During my tenure as the Chief Academic Officer, we had policies requiring students with academic difficulties to participate in the mentoring program. Although it is not a University policy, we have a policy that all Science and Engineering majors participate in the mentoring program. And this is all students, whether in academic difficulties or not. We have laboratories all over the University. The University also has a policy on advisement so that faculty have office hours to advise students. Of course, implicit in that policy is that [the] nurturing and caring nature of the school will be taking place. The requirement of office hours and how it interprets to caring and nurturing and provision of academic support is evident.

But when the interviewees were asked about the degree of success of any policy they knew about in respect to the notion of caring and nurturing environment created by the University, there was a sharp reaction. In fact, I saw signs of exasperation on
the part of the interviewees at this point. Five (5) of the interviewees demanded that teaching evaluation be done at the University because of the importance of accountability. It appeared that evaluation was not being done at the school to improve delivery of quality education or that the results of such evaluation were not being used to the satisfaction of the University employees. I was referred to the Faculty Senate website (www.phys.subr.edu/senate) to see the statement made by the Faculty Senate on this issue. One of the interviewees made this statement concerning this issue:

I don’t know of any policy, so the success is a moot issue. [As] a case in point, go to the Faculty Senate website and print the covenant. The title is “Accountability in Teaching and Learning: The Covenant.” The faculty wrote this. That this is how teaching should be done because we don’t want the few who are not doing their job to jeopardize the effort of the many who are doing their work. The faculty has challenged itself. So what is the agenda?

Referring to the success of these policies when identified, some interviewees suggested looking at the graduation rates, passage rates on professional examinations, such as the NTE, GRE, LSAT, or looking at the number of students who go to graduate school, which according to one interviewee has doubled:

I may add that in Science and Engineering, large numbers of our students enroll in graduate schools, and there is a correlation between participating in these programs and going on to get a Ph.D. degree. This has been very successful since we started the program in 1997. We can successfully correlate degree of performance because the number of those who go to graduate school has doubled since 1997.

Question four: “What are inhibiting factors to African American students’ success at an HBI, and how do the successful students overcome such problems to their
academic success? According to the respondents, study habits and paying less attention to material things, as well as making use of available assistance on campus, were the dominant themes that emerged.

**Interviews with the Students**

Although a total of 13 guided questions were included to gather detailed information from the students, the principal unit of analysis, the evaluation concentrated on those which specifically described the environment existing at the institution in the students’ own words, such as (1) interaction with fellow students, professors, and other staff members; (2) the teaching climate they knew that relates to caring, nurturing, and individualized environment; and (3) their impression of the university, the problems encountered at the school, and how successful they perceived the University to have been in the matters that were central to the investigation.

The interviews with the students yielded very interesting results. Students had more than one reason for attending the university. It appeared that the overriding reason among the students was family influence, mentioned 23 times. This indicated that those who came to the University had an affinity with the institution shared by their parents. A male student had this to say about why he chose to attend Southern: “First, my parents graduated from Southern. So, it was constantly put into my head. Because of that affiliation, I was able to come to Southern as a young kid and see what it had to offer.” The second group of students were those who believed strongly in attending a historically black University because of its “sense of blackness.” This reason was chosen 21 times. A female student from out-of-state explained her reasons for going to Southern as follows:
My first and foremost reason for attending Southern University was due to its being an historically black college. I also wanted to attend a school far away from home and since I am from Illinois, I am not surrounded by many black colleges. The third reason is because both of my parents attended and graduated from here, along with many other relatives.

Contrary to the view expressed by the out-of-state students, the third group of students indicated that closeness to home was the most important reason for choosing the school. This reason was selected on 8 occasions. In addition, the availability of scholarships awarded to the students, mentioned 7 times, was important in attracting students to the school. Somewhat important was the reputation of the university in offering popular programs such as nursing. This was identified 4 times, the same as the factors of low tuition and affordability of the institution.

Question one: “What factors contribute to the success of African American students at Southern University?” To address this question from the perspective of the students, qualitative data from the responses of the informants were examined. The items which were related to the environment and of direct relevance to the research showed that, generally speaking, the students were positive about their environment at the University. This can be supported by the perception of the students, judging by their responses to question item 3. The three most important factors which emerged from the analysis were categorized under three main headings: self-determination (mentioned 24 times); interaction with faculty vis-a-vis interaction with the university community, which includes peers and university personnel (mentioned 21 times), and the family,
which elicited an equal number of responses (21 times); and lastly, those factors categorized as others.

Self-determination emerged as the strongest reason which students identified as a success factor at the historically black university. Choosing motivation as a reason for their success showed the resolve of the students to persist and remain in school until they graduated instead of making excuses. It also showed that they were prepared to weather the storm and fulfill their college career goal with the realization that a college degree would lead to a better life. On this note one student remarked:

My parents were a great influence. They have always encouraged me to further my education. I wanted to go beyond high school. My parents didn’t attend college[,] they attended trade school which was okay back in their time. As time progressed and [I] got older, I knew that with a college degree it would be a little easier to have a better job, future, and a good life.

The recognition of the importance of self-actualization by the students as key to their success probably reinforced the determination of the students to excel and obtain their degrees the old fashioned way: through growing up, self-discipline, studying hard, endurance, and making adjustments in their newfound community for the duration of their study. In this regard, the only white male student in the sample said: “Sir, the factors responsible for my success at SUBR are based on my growing up.” Another student attributed her success to determination: “My determination to succeed is the factor responsible for my success at SUBR.” Another student said: “The factor that contributes mostly to my success at SUBR is my determination to receive my degree.” Although multiple factors were mentioned by the students, self-determination was the most identified factor of success at the university on 24 occasions.
The second most popular factor identified by students as success factor was interaction with faculty and staff and, particularly, their professors. Many students credited their success to their professors, who on many occasions demonstrated that they cared by listening to the students and even helping them during trying times, especially on personal matters. One student expressed this opinion on the role of professors and his success: “The factor I can identify that contributes to my success at SUBR is that the teachers are great and they want to see students succeed as well as pursue another degree after graduation.” There was also an indication that family support had great influence on the successful African American student. The role of mothers was especially noted as instrumental to students’ success, according to the interviewees. One student had this to say about the role played by a mother in the educational success of students at the University: “One factor that contributed to my success at Southern is my mother. She taught me to work hard and to achieve anything that I wanted to do.”

Another factor worthy of mention that was identified by several students was their closeness to God. This fact revealed the importance of spirituality in the life of the African American students and their effort to make it in college. One student attributed his success to God when he said,

I attribute my success at SUBR to various things. The main thing (factor) is my intimate knowledge of God through Jesus Christ. This factor has not only helped me spiritually mature, but it has also helped me mature and gain discipline physically, mentally, emotionally, socially, and academically.
Question two: "Does Southern University have a caring and nurturing environment conducive to learning?" Responses showed that most of the students, 27 acknowledged that the University indeed had a caring and nurturing environment, 5 students had a mixed feeling about this, while 7 indicated they did not think the University was caring enough. Nine others (9) did not respond to this question at all. Students' responses suggested that the credit for creating a conducive environment starts and ends with the University professors because of the strong expression of support and attention the students admitted they got from faculty members, except for a few other employees, such as work study supervisors, who render some support.

One transfer student expressed this opinion about the professors at Southern:

SUBR does indeed provide a caring and nurturing environment. There are counselors and teachers here who are mentors for students. They try to assist you in every way possible. Educationally[,] they listen to your problems and try to offer some solutions in order to help you[,] and they promote a good[,] healthy atmosphere necessary for you to succeed.

Another student shared this view about the caring nature of the faculty:

Yes, SUBR provides a caring and nurturing environment. Once I got out of Junior division, the professors in my department [were] very caring[,] and they want[ed] me to go on and further my education.

This student indicated that there might have been problems in the Junior Division.

Furthermore, the same student also revealed that the caring attitude may be different depending on the department of the student’s major. Another student added: "Yes, the instructors seem to be interested in the individual student."

A male student agreed:
Yes, you feel at home when you come here. The professors are very helpful and will help students out in any way they can.

One female student with mixed feelings gave this view of the campus environment:

Yes, SUBR provides a caring and nurturing environment[.] but in some ways, it doesn’t. There are those teachers and faculty/staff that don’t care about you so long as they receive their paycheck. But on the flip side, there are teachers that do care about you.

One student who felt the school was not caring offered this opinion of the campus environment:

I feel the students provide a caring and nurturing environment for each other. But the faculty’s “people skills” suck because they don’t care. Being nurtured is out of the question.

Those who felt that the school was not caring enough complained mainly about the administration.

One male student expressed this view about the administration:

No, I feel as a whole the faculty in many ways are not treated fairly and the negative attitude spawned by that treatment affects us.

Question three: “What policies has SUBR put in place to create a nurturing and caring environment for its students?” To address this question, analysis of student responses to interview question items 8 and 9 which were of direct relevance, is presented. These questions sought for the students to identify the University’s policies and their own impressions of their school. The questions also let them render an evaluation of the environment by noting the extent to which it was a caring and
nurturing climate. Because the majority of the students could not identify any policy specifically, I therefore rated their responses by the degree of positivity or negativity they expressed in their responses. What was revealed was that, generally, students at the university felt that the University has been successful in creating a caring environment. Those who offered a response in the form of a specific policy made tacit mention of the open door policy, the counseling and tutoring center, access to technology, and the courtesy count campaign, or getting more homework. It should be noted that the technology policy and the courtesy campaign, as well as the counseling center, started about two years ago. None of the students directly referred to orientation, advising, mentoring, and the like which had been mentioned earlier by a few employees as the cornerstone policy for creating a caring and nurturing environment for students.

These kinds of responses may stem from the fact that the University failed to hone its strengths and capitalize on its positives in a strategic, systemic, and effective manner. For example, during the admission and orientation processes, some of these policies, if available, should be made known to the students and emphasized to them in their freshmen classes as well. One or two of these policies should be developed as part of the University's core values and widely distributed to the University constituents.

Question four: "What are inhibiting factors to African American students' success at an HBI, and how do the successful students overcome such problems to their academic success?" The barriers that emerged were categorized under three main headings: personal problems, administrative problems, and academic problems.
According to the students, personal problems were the most prevalent inhibiting factors to academic success at the University. This is understandable in view of the fact that the students recognized that self-determination was the most important ingredient needed for their success (refer to answer in question 3) and for the actualization of their college degree objective. This position corroborates the conviction of the students that if they study hard and do what they are supposed to do, nothing can stand in their way of success. One student had this to say: “There are no obstacles or barriers that I can identify because I let nothing or anyone hinder me.” Another student said, “I feel that the only thing that can get in the way of my success is myself.” Some of the different problems mentioned were growing up, family deaths, wasting time by getting involved with the opposite sex, too much partying, procrastination, working in order to make money, using drugs, getting married, and being an athlete. In fact, the students wanted to be challenged and engaged during their college career. One student commented: “Southern University cares but it also needs to improve on raising standards by challenging us.” The student who made this statement also felt it took him too long to mature. On raising the bar for students so they can achieve, another student expressed a similar view:

Barriers and obstacles to my success came mostly in the form of teachers and peers. Teachers who gave grades without teaching did not help me at all. I needed teachers which other students would consider as “hard.” Teachers who actually taught their class. Peers also made it hard because students here at Southern are not here to learn. Therefore, they tease you if you attempt to learn something.

The second common barrier identified by the students was administrative problems.
The financial aid office was on top of the list, followed by the registration process, and general negative attitudes that some administrative personnel were alleged to demonstrate to students. This could be corroborated with the content analysis done previously in this chapter. One student shared this view of the administrative personnel:

The factors that have served as obstacles would be the way administrative personnel operate in the system. I feel they are only here to receive a decent pay and they are not dedicated to providing a caring environment that assists the student body.

Another agreed, saying: “The staff here at Southern are very rude. [They] can really discourage a student during registration.”

There were those students who expressed the view that their major is too demanding and thus tended to stress them out. One student had this to say:

I have a stressful major (nursing) because it requires so much[.] and the grading scale is much higher than in the rest of the University. Therefore, I have to strive harder than what I am used to doing. I feel that things can get overwhelming and stress me out at times, and that is when I get discouraged, but my solution is prayer.

A few students also alleged that some faculty were not doing their jobs. This seemed to confirm what several of the faculty interviewed were saying when they stressed the importance of evaluation as contained in “The Covenant.” This was an indication that not all the faculty have joined the effort to promote learning and quality education that the student needs for creating a caring environment. On this note, a student said: “The only barrier in my way are the professors who don’t care enough to actually teach or take time out with the students.”
The students' success may also depend on the extent of their involvement and integration on campus. Many students admitted that they were well integrated in the university community by the sophomore year. Integration into the campus life may involve, for example, attending football, basketball, and volleyball games. Other such events were orientation, springfest, joining fraternities and sororities, and departmental clubs, participating in student government association, and joining a church adjacent to the university. In spite of the benefits associated with these activities, some students suggested that grades may drop at the junior-senior years as a result of getting too involved with fraternities, having "bad friends," or "messing" with the opposite sex.

One female student remarked:

Some barriers would have to be my lack of understanding in some of my classes[,] and also I had problems remembering to do assignments or just not doing them because I didn't feel like it. My grades dropped when I started to get involved with organizations and boys.

One male student bluntly admitted the same problem: "Family deaths, lost loves, friends, and gangs. Women, liquor, and drugs."

One out-of-state student picked the issues which may be directly impacting non-Louisiana resident students and remarked:

Factors that have been obstacles to my success are the increase in the out-of-state fees and inadequate housing as part of Southern University.

Transfer students did not appear to experience transfer shock at the University, except for one student who felt out of place and was unaccepted until senior year.
Nontraditional and white students however did not appear to be fully integrated into the university socially. The white male remarked, “I just go to school.” This same student also said he came to Southern only because it was convenient. On the other hand, a white female attempted to get involved because this was congruent with her belief in promoting cultural diversity. According to her, she tried to get along without engaging in any special activities during her freshman year. However, by sophomore year, she said that she became involved:

I joined the sign language club and attended a few football games. I tried to join the SGA but they seem to be a clique.

This position supports some of the views expressed by the university employees on the success factors among students and their integration and that white and nontraditional students may not be engaged in the social life of the university.

The answer to the second part of the fourth question was revealed by determining the degree of negativity or positivity the students felt about the University. A majority of the students felt that they had been successful at resolving problems at the University. This is understandable in view of the fact that most students believed that their success or failure depended on the amount of work they put into their study. The problem areas most frequently identified, as earlier mentioned, were financial aid, registration, and the campus police. This seemed to confirm the results of the graduating students’ survey presented in the discussion of content analysis. One student suggested that she got her problems solved in this manner: “I have learned to not take one person’s answer as law. I make sure to contact the proper person to have my
questions/concerns answered.” One student ascribed a religious undertone to the way students resolve problems at the University:

As previously stated, I resolve my problems through prayer[,] and it gets kind of difficult being saved at a large black college because there are so many temptations that I have encountered. However, I haven’t had any major problems dealing with the University itself, besides the frustration of the long lines and registration process, but after a while I got used to it.

Generally, students’ responses supported the premise that the college environment (nurturing environment) at the University had a direct impact on students, and they viewed it as very important to their educational success in that it made life on campus better, their higher education experience richer and smoother, and made their college career path a fulfilled dream. They also showed that the caring and nurturing attributes the University is known to provide were the paramount reasons for their coming to the University. Many of the problems encountered were the same among students.
SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

My primary goal for embarking on this investigation was to illuminate those factors that influenced the academic success of African American students in an historically black institution. This kind of study is equally important to four-year and two-year colleges because it can be conducted across majors and at departmental and other institutional levels for the purpose of summative and formative evaluations that would guide how administrators run their colleges. Above all, it can be used to determine one of the most important aspects of college education—students' academic performance.

A mixed method approach which involved quantitative and qualitative analyses was used. Both methods were complementary to each other; thus, they provided a richer study overall than would have been possible from just a single study method. The approach also provided further insight into the understanding of African American college students at an historically black institution. Furthermore, using this method made it possible to perform the triangulation of results which enhanced the validity and reliability of findings. Data for the analysis was collected from multiple sources: demographic, institutional, and performance data for the 1993 through 1997 academic years were obtained from archival data from the Board of Regents’ Statewide Student Profile System, Completers System, and the Student Information
System kept by the University. Interviews were conducted with university employees and with a sample of students, including the successful and not so successful, native and transfer, and university employees. Internal and external documents relating to the institution were also examined.

The study revealed that in the quantitative analysis, ACT score, gender, enrollment status, age, and living on campus, in that order, significantly influenced academic success among African American students at an historically black institution. In addition, the first-term GPA of African American students may be the determinant factor in whether a student will persist to the sophomore year and become "a stayer" or leave the university and become "a leaver." First-term GPA ultimately also affected whether students would remain in school until they graduated. Findings from the correlation analysis suggested that academic performance as represented by students' GPA during the first-term or semester at the University was related to the ACT score, gender, race, age, housing arrangement, and persistence of students. There was a negative correlation between students' age and ACT, ethnicity, housing, and admission status, as well as between GPA and students' gender, while GPA and ACT score were positively related to retention and graduation.

In a nutshell, findings from the multiple regression indicated that institutional performance as revealed by first-term GPA, year-to-year retention or five year graduation rates, was predicted by input and environmental characteristics. The strongest positive predictor was the ACT score, while age was negatively related to students' success at the University. This was consistent with bivariate correlation
analysis. Qualitative study results also confirmed some of these findings. For instance, some employees interviewed felt that students’ success in the classroom depended on preparation from high school, that female students were now outperforming males, and that they did not notice any difference between native and transfer students.

Additionally, on the average, female students recorded higher GPAs of 2.37 compared to the males 2.05, a .32 difference. At this University, females actually performed better. This result confirms the findings of many previous studies conducted in white institutions that have suggested that males perform differently from females. This was supported in the qualitative study when the university employees interviewed took great pains to point out that females were doing very well and even outperforming their male counterparts in the sciences. The result of this research further showed that race was an important indicator of achievement in college. White students’ average GPA of 2.46 was higher than the average of 2.21 for African American students. This difference, according to some employees interviewed, may be due to the better precollege preparation of white students compared to African American students’ precollege preparation. These findings indicated that previous similar observations based on studies conducted on white campuses also held true for the students at this university, a predominantly black institution.

There was also an indication that housing arrangements had an influence on student performance. The outcome of the analysis also seemed to be in agreement with previous studies that suggested that living on campus could have beneficial
effects on students' performance. The average GPA of students who lived in the University dormitories was 2.31 compared to 2.13 reflected by commuter students. Proponents indicated that those who lived on campus performed better than those who commuted and lived either in apartments by themselves or with their parents because of social interaction with peers and increased contact with their professors. However, some students from the interview hinted that this gain may be affected by the junior-senior years when some students joined organizations and moved off campus. Such a change often led to a drop in student grades. Perhaps this knowledge would assist parents better in their decision to let their children stay in the university dormitories. Although in this study students were grouped into two categories in regard to their housing arrangements, a strong argument exists for distinguishing among campus residents, commuters, and those students who live on their own in apartments (Delucchi, 1993; Pascarella & Terenzini, 1991).

The findings concerning age showed some confusing results in the quantitative study. The qualitative study analysis appeared to confirm this because more of the university personnel who were interviewed felt that nontraditional students performed better than traditional students because of their maturity and the greater motivation to succeed. The quantitative study showed that age was negatively correlated with ACT score, race, living on campus, the intensity in going to school, and that retention variables were a significant predictor of achievement when native students were examined as a homogenous group.
On the average, the 17-20 year-olds performed slightly better (2.22 GPA) compared to the nontraditional (2.20 GPA). This slim margin did not seem to support its significance.

The reason for the competitive showing of nontraditional students could be adduced to the fact that they were more motivated and were therefore highly dedicated, well focused, and applied themselves more to their studies. This result further indicated that colleges and universities must begin to pay more attention to the older students by providing more evening classes, offering extended service by the bookstore when feasible, and providing child or day care service for the children of nontraditional students. Some of the mature students will need more encouragement in the form of scholarships, involvement in honors programs, better advising tailored to their unique needs, etc. This new group of students can have a very positive influence on the traditional students because of the challenge they pose to those thought to originally have an edge. This challenge may make younger students work harder. The confusion in understanding students’ performance by age may be explained by the fact that the gender and the intensity with which students go to school have different effects (see Table 4.2b-4.2c).

When an analysis of the means for natives was performed on students’ GPA by gender and time to degree, female students who finished in four years had a better showing, with an average GPA of 3.17 and a standard deviation of .53 versus 3.09 for males with a standard deviation of .55 (see Table 4.2d). Students with higher GPAs during the first year generally graduated faster (in four years) than students with lower
first-year GPA (Davis & Nettles, 1987). This was a clear indication of the relationship of first-year GPA and the likelihood of graduating in four years. Those who finished by the fifth year had better grade point average than those who may complete their degree at a later date (2.97 versus 2.06; Table 4.2i).

What this also suggested was that beginning semester/year GPA is an indication of a critical point in college and student achievement, and that if students had good orientation when they began college, were better advised, were provided timely support programs, and had favorable experiences coupled with a supportive environment, they could build, during the first semester, the foundation for a very desirable outcome of degree attainment within four to six years. This evidence may lend validity to the adage that says a good beginning makes a good ending. This can provide insight and avenues for decision-makers on university campuses to formulate planned action to promote greater academic success of their students, especially during the first year. Although the effects of some variables could not be determined for lack of data at the qualitative stage, nevertheless it was revealed that self-determination or motivation, study habits, family support (specifically that of the mother), as well as involvement in school activities which ensure students’ integration into the University community and the church, were very important factors for student success at an historically black university.

On the other hand, the investigation showed that there was no evidence that the admission status of students (native or transfer) affected students’ academic performance. The correlation analysis performed showed the similarities of students
at this level of comparison in this University. The GPA of both native and transfer students (2.22 versus 2.24) revealed the commonality shared by both groups (Table 4.1l). Thus, it can be concluded that when comparing students of different admissions status, there was no difference in the academic performance of native and transfer students at the University. Could this be because the students who transferred adjusted well socially and academically to their new environment, or did the students simply share some common characteristics with their native counterparts? One plausible explanation for this situation was the open admissions policy of the institution under study. Secondly, the case study suggested that most transfer students did not appear to have transfer shock, except for one that claimed he was not fully accepted until his senior year while another student lamented going to a white school instead of coming straight to Southern where he was sure to get a caring and individualized learning environment. In fact, the latter student’s grades went up since he came to Southern. Generally, alienation that African American students seem to experience at traditionally white institutions was not a factor at the historically black institution. Lest we forget, both studies also showed that some of the transfer students in the original sample at the onset of the investigation spent more than one semester in their previous schools.

The notion that community colleges prepare transfer students better can be tested when Baton Rouge Community College begins to graduate its students in the near future. A number of its students were expected to attend the referenced University after they completed their two-year program at the school. Furthermore,
the fact that ACT, gender, enrollment status, age and living on campus, and, of course, first-term GPA and retention were shown to be significant predictors of academic success supported the conventional wisdom about the importance of these variables. The average GPAs, according to these categories, further illustrated the level of their significance (see Tables 4.1a-4.11, and 4.2a-4.2i).

Focusing on the relatively small proportion of students who graduated in four years, one must acknowledge the many mitigating factors which confront African American students and other minorities, such as Hispanics or American Indians (excluded from the study). These factors make it almost impossible for a sizeable number of them to graduate from HBCUs in four years. Some of the reasons for their inability to graduate in four years can be attributed to the characteristics of majority black institutions. These include, but are not limited to, admitting less prepared students (selectivity), enrolling students who come from low social-economic status (SES) or poor family background, enrolling first generation students who are likely to work to support their education or who attend school part-time, etc. (Allen, 1992; Astin, 1993b; Pascarella & Terenzini, 1991).

These conditions create an enormous burden on the students, which in turn hinders them from concentrating on their degree attainment efforts. The identified negative factors are some of the challenges HBCUs inherit from their students when the latter come to institutions, such as the one where this study was conducted, which espouse the talent development notion of excellence while toiling hard to provide quality education to students. As revealed by previous research, the culmination of
the extra baggage, so to speak, on African American students in college is the great likelihood of obtaining weak grades, dropping out, or stopping out. Moreover, dropping out, irrespective of the reasons, inevitably delays graduation. This means that using graduation data solely as an indication of an institution's performance for funding purposes (performance funding as frequently mentioned in the academe today) is to maintain the status quo of inequity that exists in American society from which higher education is not insulated (Allen, 1992; Astin, 1993b).

In another vein, as America attempts to level the playing field for black students through provision of all forms of financial aid, questions arise about the seriousness with which it is being done so that minorities can gain access to college education and raise their standard of living. The recent attacks on affirmative action have certainly not helped the situation in this endeavor. A case in point is the passage of Proposition 209 in California and other programs in other states that discourage targeted recruitment of minority students in postsecondary institutions. The lesson to be learned from such onslaughts on affirmative action is that basking under the protection of past discrimination against African Americans will not alleviate the problem of discrimination against African Americans on the educational front in this country.

Since education, we are all convinced, will open the door of opportunity to minorities in American society, students should be made to realize the importance of education right from the start of their university educational experience so that it can reverberate in their minds throughout their college career. The attitude that some
parents seem to have is that their children are mature and thus can be left to fend for themselves in college. This has not helped. Postsecondary institutions must find ways to involve the parents of students in educating the young adults. Inasmuch as America fails to reject the vestiges of economic inequity in its entirety, African Americans and other minorities such as Hispanics, Native Indians, etc. and the institutions they attend will continue to be saddled with a high percentage of students who take more than four years to graduate. HBCUs will also perennially witness low student performance when compared to their white student counterparts.

The multitude of approaches mentioned in the qualitative analysis should form part of a comprehensive effort by the University to promote student success. These include proper orientation, emphasis on advising, a universal and systemic mentoring program to be institutionalized throughout the entire university, focused curricula that take into account current market demands, reorganization of the financial aid office so that it operates effectively and responsibly in its delivery of service, internships for students, and a host of others. Students must not be left to fend for themselves. All hands must be on deck as it were, to get the students to the finish line. Furthermore, there is a need for a well coordinated effort of all these programs at the university.

Based on the findings of this study, and despite this situation, no one should be tempted to say that predominantly black universities graduate students in a manner that undermines the achievements or purpose of their existence. In fact, HBCUs conferred 28,327 bachelors degrees during the 1994-1995 academic year alone (Snyder et al., 1997). Another point worthy of mention is that current information on
college students has suggested that now it generally takes longer than four years for
college students to graduate (Astin, et al., 1996). On this basis, to underrate the
achievements of HBCUs with respect to overall student graduation statistics is to miss
the real purpose of education. Instead, the comparatively low graduation level is a
signal that the institution should reinvigorate the orientation, mentoring, advising,
academic progress monitoring, and all other such programs that enhance the student's
ability to earn a degree.

For instance, SU students and university employees were unsure whether
mentoring was still operational in certain quarters or dead. One wonders why the
program was not implemented university-wide. Why would a good program that
worked be stopped even if administrative personnel changed? Therefore, it is
recommended that systemic mentoring be adopted by the entire University. Some top
students who graduated from the University credited their success to their mentors.
Its implementation should be planned, well coordinated, and evaluated once
implemented. The University should also consider hiring a retention coordinator like
other universities in the country. The entire university community should be involved
in the effort to create and provide seamless educational opportunities that are proven
to be successful.

Furthermore, reenergizing those aspects, whether academic or nonacademic
contributors to academic success, will lead to higher GPAs, higher persistence rates,
and higher graduation rates. The University is reputable enough to be a leading force
in educating a young, skilled labor force for maintaining technological advancement
and a competitive edge in the globalized economy. Authors Bohr, Pascarella, Nora, and Terenzini (1995) have suggested that black colleges are more effective than predominantly white institutions in providing a supportive environment for black students (p. 83) without sacrificing quality and while offering education that matches those of white institutions in intellectual rigor and impact. They even go further to recommend that other schools emulate their example. Similarly, if the talent development definition of excellence postulated by Astin, which is associated with HBCUs, instead of the resource reputation linked to traditionally white universities (Astin, 1991; Justiz, Wilson, & Bhork; 1994), can be given any credence, then it can be said without exaggeration that nowhere else is talent development of African American students being as well nurtured as in HBCUs although both tasks can be pursued simultaneously without sacrificing the other.

In order to improve the success of students, the University has taken a giant step to address the low percentage of students who graduate in four years and in other areas relevant to overall performance, such as GPAs and persistence, by planning to implement a selective admissions policy in the year 2001. This policy may fundamentally change the composition of the student body of the institution. Although in the beginning, enrollment may decline slightly as a result of this policy, this negative impact will be short-lived and will be offset by the accompanying positive results which should come from such a policy. Several research findings and numerous other pieces of literature (ACE & ECS, 1988; Astin, 1993b; Babaoye, 1997; Wenglinsky, 1996; Smith, 1995; and many others) point to the fact that
selective admissions will lead to high student academic success in the form of higher GPAs, will improve the rate at which students persist and will increase the larger number of students who will graduate within four years.

However, the service areas identified by students and university personnel as barriers to success pointed to some weaknesses in the manner in which the University operates. There was ample evidence to support the students' concerns. The implication was that such problems when they existed tended to give the impression that the university did not care about its students. The former President of Southern University System, Dr. Dolores Spikes, a distinguished scholar and administrator, wrote a memo in recognition of these problems when she enjoined the three Chancellors in the Southern University System on August 29, 1994 to take necessary action in order to create an atmosphere that would help to:

educate students in a proper, nurturing environment. We cannot let our own frustrations interfere with superior commitment to and delivery of service aimed at graduating students who can compete globally and who have a high degree of moral and intellectual capacity for bettering the lives of all peoples.

The University cannot afford to squander the goodwill and loyalty of its clientele. Evidently, the University did provide a caring and nurturing environment, as students who were interviewed repeatedly confirmed. Some of the practices engaged in doing this were open door policy, making students comfortable, promoting a sense of closeness, and providing support services. Part of that effort also involved a combination of those environmental factors or stimulus agents identified as existing...
in the University by scholars such as Astin (1968), Chaffee and Tierney (1988),
Pascarella and Terenzini (1991), Garibaldi (1984), and others. These agents could be
faculty/staff, physical facilities, campus aesthetics, access to technology, and social
interactions prevalent on the campus that made the learning experience rewarding and
interesting and that also made SUBR a unique institution in the process of providing
quality education to its students. Given these facts, the university must reorganize its
administrative apparatus. Each unit should be staffed by people trained and skilled for
the job. The University cannot afford to continue to improvise. Where it was
determined that the University lacked skilled personnel, it should recruit quality staff
from outside or grow its own. Evaluation of teaching delivery must be performed and
utilized with strict adherence to the fundamental principle of fairness. Evaluation
should not be used as a tool of vendetta or for punitive purposes. Rather, it should be
used for improving teaching delivery. On that note, it is worth mentioning that the
University administrators must avoid negative politics on campus which may cause
mistrust, fear, paranoia, and a breach of team effort. Such a situation may lead to
erosion of personnel morale and quality of service and teaching on any University
campus.

The lesson to be learned here is that students know when they see a better
environment because they can feel it, express it, appreciate it, and make
recommendations to their friends and family members. Bearing this in mind,
institutions of higher learning and those entrusted with their operation must match
words with their actions and deliver. The loyalty of the customers to an organization
(institution) is by no means guaranteed forever and must not be taken for granted. But when words are matched with actions and found to be consistent with quality and efficient service, consumers' loyalty to an institution gets even greater, deeper, and becomes further solidified, regardless of whether caring and nurturing is implied or expressly stated.

Perhaps the most important outcome of this study, besides making attainment of a Ph.D. degree a reality for this investigator, was its contribution to Southern University, other HBCUs, the State of Louisiana, and higher education in general, especially at this time, when accountability in the educational arena has taken center stage. Retention and graduation issues are being considered in higher education by consumers, governments, and other supporters such as philanthropists. The reason why performance measurements are more broadly embraced is because, in essence, they are an institution's own report card as well. Retention and graduation rates are among the data used nowadays to determine institutional performance. In this regard, it is not uncommon that these rates are determined by mere raw counts or by weighted averages. For instance, the State of Louisiana has introduced what it calls Performance Incentive Funding. The retention and graduation rates are among those considered in the measures developed for rewarding schools. By using the prediction methods utilized in this study, institutional effectiveness can be better determined. The beauty of this method is that it considers the input and environmental factors which raw data and averages cannot show that may affect the institutions. It also makes it possible to compare the actual and expected rates to determine the
performance of the institution in meeting its goals. By so doing, the efforts of the Louisiana State government under Governor Mike Foster, who is now making a huge investment in education and in particular higher education, can be justified and appreciated in the not so distant future.

Lastly, special attention should be given to what we regard as the educational imperative for American higher education. From a different standpoint, if the latest population forecast from the U.S. Census Bureau, 1993, which states that African Americans, Asians, Hispanics, and other minorities in America will continue to grow at the current rate, holds true, more than one-third of the school-age population will be from these groups by the year 2000: “Statistics on the changes in the racial-ethnic composition of elementary and secondary enrollments and of high school graduates further illustrate this shift … and if all racial groups in 2005 attend school at the rates of whites today, … the number of students will increase by an additional 2.7 million students” (Zuniga, 1997, pp. 7-9). This means that America will have to rely on the labor of these groups who will become the new majority and dominate the labor market. Consequently, investing in human capital by educating the minority groups today becomes a social, a moral, a political, and an economic imperative if America is to continue to compete favorably in the global arena.

Limitations and Future Study

The scope of this study was constrained because of limited access to data that would have made it possible to include the determination of other areas, such as the effect of financial aid, ACT/SAT score, HSGPA, SES, motivation, family status, etc.
on academic success. These omitted variables, as this research suggested, were important to the understanding of African American students at HBCUs but could not be included. The omission underscored the need for further studies in these areas. 

Time limitation was also a constraint to the full investigation of the subjects. It would be even more revealing if the exercise were carried out over a six-year period, thereby providing a possible trend in observation. The monitoring of students' academic achievement would be even more revealing if there were no constraints in conducting studies across semesters for the determination of the academic performance of students beginning from when they came into the University until the point of graduation. Such a comprehensive longitudinal study, although feasible and encouraging, calls for more personnel, database availability, time, and money than I had access to. For the qualitative study, the extreme difficulty in gaining access and the low rate of participant subjects necessitated the use of a substitute sample. This constitute a weakness in this phase. In order to safeguard against this occurrence, such interviews should be conducted immediately at the end of the year covered in the investigation. Nevertheless, this study, despite its limitations, has further helped to explain the factors that may influence academic achievement on college campuses.

In closing, it needs to be noted that although the findings of this investigation were important to all colleges and universities, making generalizations across the board in the application of grade point averages by making comparisons with the findings in this study must be avoided. The results were specific to the institution at which the study was conducted. One important reason for such caution is the issue of
missing data. For instance, students who withdrew from the university after the deadline date and did not complete the semester received a weak to an automatic failing grade. The GPAs of such students when included in the sample were bound to affect the overall student performance of that class or sample, thus influencing the result of the research. The issue of missing data is a great dilemma to any researcher, and the complexity of studying students success and college environment in this regard has not made it an easy task.
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APPENDIX A

PERMISSION TO USE UNIVERSITY DATA FOR DISSERTATION RESEARCH
MEMORANDUM

TO: Chancellor SUBR

FROM: Marcus Babaoye

SUBJECT: Permission to Use University Data for Dissertation Research

DATE: March 28, 1999

As you are aware, I am pursuing my doctoral degree at Louisiana State University in Education Research Methodology. I am pleased to tell you that it has progressed well with your support, and I am now ready to begin work on my dissertation. It is my intention to focus on a study that will benefit the University and be used as a model on college campuses, especially historically black universities across the country. The main focus of my research is determining factors which contribute to the academic success of African Americans at a predominantly black university. The first phase of this project will cover a five year period which can provide very useful information for policy direction and be another milestone in the University’s accountability effort.

I am seeking permission to use the following archival records at this university in my research:


I will appreciate your granting me permission to conduct this study on the students who attend this university. Similar studies have been conducted on other college campuses, e.g., traditionally white institutions. The investigation will involve the use of students’ enrollment data and archival records. The grade point average shall be used only to test statistical differences where necessary. As the University moves toward selective admission in 2001, this study could also serve as a blueprint for enrollment management for the University.

To ensure compliance with the Buckley Amendment of the Family Educational Rights and Privacy Act, the data analysis file will not contain any identifiable student information. I also plan to interview a sample of successful African American students and other recent graduates to obtain their perspectives of the factors which contributed to their successful experiences at the University. The interview will also involve a few University personnel for triangulation purposes. Certainly, all data will be treated in a strictly confidential manner.

There can be no doubt that this project will also be a significant contribution to the University. Thus, I will appreciate your kind understanding relative to this request.
MEMORANDUM

TO: Assistant Commissioner for Planning and Research
FROM: Marcus Babaoye
SUBJECT: Permission to Use Board of Regents Data for Dissertation Research
DATE: March 28, 1999

As you are aware, I am pursuing my doctoral degree at Louisiana State University in Education Research Methodology. I am pleased to tell you that it has progressed well with your support and I am now ready to begin work on my dissertation. It is my intention to focus on a study that will benefit the State and be used as a model on college campuses, especially at historically black universities across the country. The main focus of my research is determining factors which contribute to the academic success of African Americans at a predominantly black university. The first phase of this project will cover a five year period which can provide very useful information for policy direction and be another milestone in the University's accountability effort.

I am seeking permission to use the following archival records at this university in my research:


I will appreciate your granting me permission to conduct this study on the students who attend this university. Similar studies have been conducted on other college campuses, e.g., traditionally white institutions. The investigation will involve the use of students' enrollment data and archival records. The grade point average shall be used only to test statistical differences where necessary. As the state supported University moves towards selective admission in 2001, this study could also serve as a blueprint for enrollment management for other universities in the state.

To ensure compliance with the Buckley Amendment of the Family Educational Rights and Privacy Act, the data analysis file will not contain any identifiable student information. I also plan to interview a sample of successful African American students and other recent graduates to obtain their perspectives of the factors which contributed to their successful experiences at the university. The interview will also involve a few University personnel for triangulation purposes. Certainly, all data will be treated in a strictly confidential manner.

There can be no doubt that this project will also be a significant contribution to the University and the state. Thus, I will appreciate your kind understanding relative to this request.
APPENDIX C

RESEARCH STUDY CONSENT FORM
FOR STUDENTS AND UNIVERSITY PERSONNEL
Name (Optional): __________________________________________________________

Current Classification: Freshman  Sophomore  Junior  Senior

Graduated  (Year): _______________________

School : ____________________________________ Major: _________________

I have consented to participate in an interview session as part of a study of African American college students. I understand that my participation is completely voluntary and that my comments will be handled in a confidential manner. In addition, I understand that I can end my participation at any time with no consequences.

____ I give permission for my full name to be used in quotations attributed to me.

____ I give permission for my first name to be used in quotations attributed to me.

____ I do not give permission for my full name to be used, and I ask that reference to any comments made by me be treated anonymously.

____ I would like to receive a copy of the final report.

____ I do not wish to participate in this project.

General comments:

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Signature: _______________________________ Date: _______________________________

Interviewee

Signature: _______________________________ Date: _______________________________

Interviewer
APPENDIX D

STUDENT INTERVIEW QUESTIONS
STUDENT INTERVIEW QUESTIONS

Introduction, begin interview with a statement to establish rapport....
Good morning/afternoon/day, sir or madam. This interview is aimed at determining
the factors that influence academic performance and the college environment of
students at Southern University. Please feel free to provide detailed information
about the questions asked. You may provide additional information that you think is
important to you but is not covered during this interview. No form of identification
is required.

(1) What influenced your decision to come to Southern University? Please give reasons.

(2) Please give a brief description of yourself.

(3) What factors can you identify as contributing to your success or failure at
SUBR?
(4) What factors can you identify as having been barriers or obstacles to your success?

(5) How successful have you been at resolving problems you experienced at the University? Give a detailed response.

(6) How would you describe the campus environment at SUBR?

(7) Do you think SUBR provides a caring or nurturing environment?

   If so, how does SUBR provide this environment? Describe:
If not, why doesn't SUBR provide a caring or nurturing environment?

(8) In your judgement, how successful has Southern University been in creating a caring and nurturing environment? Please give reasons for your position.

(9) Do you know of any policy that SUBR put into place to create a caring and nurturing learning environment for its students?

(10) How would you describe your interactions with your professors and peers in general?
Can you describe your integration into the University, specifically with regards to activities, events, and organizations?

During your freshman year:

During your sophomore year:

During your junior year:

During your senior/graduating year:
(12) Overall, how satisfied are you with your college experience at SUBR? Please give a detailed response.

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(13) Please express any further opinion about the University in the form of suggestions, comments, commendations, etc., that you wish to express about your college experience at SUBR.

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Thank you for your participation and good luck.
APPENDIX E

PROFESSOR/DEAN/UNIVERSITY
PERSONNEL INTERVIEW QUESTIONS
PROFESSOR/DEAN/UNIVERSITY PERSONNEL
INTERVIEW QUESTIONS

Introduction, begin interview with a statement to establish rapport....

Good morning/afternoon/day, sir or madam. This interview is aimed at determining the factors that influence academic performance and the college environment of students at Southern University. Please feel free to provide detailed information about the questions asked. You may provide additional information that you think is important to you but is not covered during this interview.

(1) How long have you been in the teaching/administrative profession/position?

(2) Why did you choose to teach/work at Southern University?

(3) What do you think is the role of the professor/dean/secretary other than teaching or providing service?
(4) Can you describe your interaction in and out of class with the students?

(5) How do you try to create a caring and nurturing environment?

(6) From your observation and experience, how is life different for 

Male and female students?

Native and transfer students?
(7) What factors do you feel contribute to students' performance and their ultimate success on the basis of your knowledge of the students at the University?

(8) Are there any University policies that promote a caring, nurturing, and individualized learning environment?
(9) How do the policies or programs you identified above work?

(10) To what extent have these policies been successful?

Thank you for your time.
APPENDIX F

CORRELATES OF RETENTION
CORRELATES OF RETENTION

Academic Factors:

High-School Performance (GPA, Rank) + (but many high-potential students drop out)
Academic Aptitude +
Poor Study Habits -
First-Term Grades + (but many students leave in good standing)
Academic Rating of High School + (relates primarily to breadth and quality of curriculum)

Demographic Factors:

Age +/- (older students tend to drop out of curriculum)
traditional
Sex +/- (not in itself a factor but may be related to others)
Socio-Economic Status +/- (not in itself a factor but may be related to others)
Ethnicity - (minority students drop out more frequently, but evidence is ambiguous as to why)
Size of High School +

Aspirations and Motivations:

Level of Degree Aspiration +
Intention to Transfer -
Commitment +
Peer-group Influence + (relation is positive if peer group is also enrolled)
Vocational Goals +/- (positive if a vocational program requires certification)
Satisfaction + (but results surprisingly ambiguous)

Financial Factors:

Concern about Finances -
Financial Aid + (but form of aid can influence persistence)
Employment (Full-time) -
Employment (Part-time) + (especially if on-campus employment)

APPENDIX G

LIST OF ADDITIONAL VARIABLES

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LIST OF ADDITIONAL VARIABLES

Institutional Characteristics
Type and control (6 measures)
Gender
Race
Size (2 measures)
Student-faculty ratio
Percentage who are graduate students
Expenditures (2 measures)
Average faculty salary

Curricular Measures
True core
Major-dominated
Type of distributional system (4 measures)
Written evaluations
Offers Women’s Studies or Ethnic Studies (2 measures)
Specific requirements (6 measures)

Faculty Environment
Behavior-value-satisfaction factors (14 measures)
Perceptual factors (8 measures)
Percentage of women
Percentage in science fields
Percentage with doctorates
Teaching techniques (4 measures)
Hours per week spent teaching and advising
Political orientation
Use of teaching assistants
Other (2 measures)

Peer Environment
Selectivity and academic ability
Socioeconomic status
Preference for different majors (14 measures)
Political orientation
Science preparation
Racial composition (3 measures)
Religious preference (3 measures)
Reliance on financial aid (2 measures)
Percentage living on campus
Peer ‘personality’ factors (8 measures)

Individual Involvement Measures
A. Known at time of entry
Place of freshman residence (4 measures)
Type of financial aid (12 measures)
Basis for financial aid (3 measures) Freshman major choice (16 measures)

B. (Occurring after entry measures) Academic involvement (22 measures)
Involvement with faculty (9 measures)
Involvement with student peers (14 measures)
Involvement in work (4 measures)
Other (11 measures)

Astin’s (1993b) list of additional variables.
DEMOGRAPHIC DATA SHEET
No identifiable information is requested.

(1) Gender: Male_____ Female_____ 
(2) Race: African American (Black)_____ White_____ Other_____ 
(3) Admission Status: First-time Freshman (started school here)_____
   Transfer (spent at least one semester somewhere else)_____
   If transfer student, how many semesters did you spend elsewhere? _____
(4) How old were you when you started school (college) here at SUBR? _____
(5) Current Classification: Freshman_____ Sophomore_____ Junior_____ 
   Senior_____ Graduating Senior_____ Graduate_____ 
(6) Residence: Louisiana_____ Out-of-state_____ International_____ 
(7) Where did you live during your First-term semester at the University?_____ 
   (A) On campus housing 
   (B) Lived with parent/Off campus housing in an apartment 
(8) What was your First-term semester GPA at the University? _____
(9) What was your ACT score? _____
   What was your SAT score? _____
(10) What year did you started school here at SUBR? _____

For the next part of the survey, please make **objective and full or complete statements** to the questions asked.

Thank you greatly for your participation.
VITA

Marcus Babaoye obtained a bachelor of Science (BS) degree in marketing with a minor in management in 1987 and the degree of Master of Public Administration (MPA) in 1991 at Southern University, Baton Rouge (SUBR), Louisiana. He will receive the degree of Doctor of Philosophy (Ph.D.) in educational research in December 2000. His areas of interest are action research and higher education policy; the impact of different types of institutions on student development and their success; assessment; and evaluation research in educational processes with an emphasis on higher education. His current vocation is in the areas of strategic planning, assessment, and institutional research. He is presently the Director of Planning, Assessment, and Institutional Research at Texas College, Tyler, Texas.

Marcus was formerly a planner and institutional researcher at SUBR and the Southern University System (SUS). While working in the SUS, he participated in major policy studies on topics such as selective admissions, curriculum review, out-of-state fee increases, salary studies, total quality management, accountability, and performance matters, as well as on reaccreditation and other important issues affecting the SUS. Prior to these, he also worked for the Legislative Fiscal Office in Baton Rouge, Louisiana. Before coming to the United States, Marcus worked as a public relations officer for an international oil company in Nigeria.

Marcus Babaoye has published and presented at professional association meetings. He has worked with faculty on a number of research projects, proposals, data entry, and statistical computer programming and has provided technical expertise on
SAS and SPSS. His experience in research designs is extensive and includes quantitative and qualitative analyses and working with large data sets using a variety of conceptually grounded measures and sophisticated data analysis procedures. He provided data and information in usable format for executive decision making on a University campus and worked with top University administrators and coordinating agencies like the Board of Regents, Department of Education, the Division of Administration, etc. He has also taught computer software applications to students. Marcus was selected twice as an evaluator by the Association for Institutional Research and awarded training grants by the National Center for Education Statistics in Washington, D.C. He hopes to remain active in exploring further issues affecting student outcomes and higher education in general, as well as K-12 through computer statistical programming, strategic planning, assessment, evaluation research, and consulting.
Candidate: Marcus S. Babaoye

Major Field: Educational Leadership and Research

Title of Dissertation: Input and Environmental Characteristics in Student Success: First-Term GPA and Predicting Retention at an Historically Black University

Approved:

[Signatures]

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

[Signatures]

Date of Examination:

July 12, 2000