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A Comparative Analysis of Graduation Rates of African American Students at Historically Black Colleges and Universities and Predominantly White Institutions

by

James Hugh Pogue

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TABLE OF CONTENTS

LIST OF TABLES	7
LIST OF ILLUSTRATIONS	8
ABSTRACT	10
CHAPTER ONE	10
INTRODUCTION AND OVERVIEW OF THE	
STUDY	10
Purpose of the Study	13
Significance of the Study	
Conceptual Framework	
Differential Characteristics of African American Student	
HBCUS and PWIs	16
Student Culture: An African American Student Perspect	
Student Success by Type of Institution	
Factors that Play a Role in Retention, Persistence and	
Graduation Rates	24
Research Questions	
Limitations of the Study	
Summary	
CHAPTER TWO	28
REVIEW OF RELEVANT LITERATURE	28
Historically Black Colleges and Universities and African	20
American Students	
The History	
Legitimacy	
Future Concerns	
Student Retention, Persistence and Graduation Rates in	41
Higher Education	
Research on Models of Departure	
The Research on Graduation Rates	
Student Culture	
Summary	

TABLE OF CONTENTS - continued

CHAPTER THREE	53
RESEARCH DESIGN AND METHOD	53
Background Information	53
Data Collection	55
Variables	 59
Statistical Treatment	6 0
Analysis	61
CHAPTER FOUR	63
RESULTS AND DATA	63
Descriptive Characteristics	63
State Characteristics	63
Institutional Characteristics	70
Student Characteristics	 74
Graduation Rates	77
Institutional Data	
Summary	81
Institutional Characteristics	81
Student Characteristics	84
Males	84
Females	85
Gender Summary	85
CHAPTER FIVE	87
CONCLUSIONS	87
Research Question One	
Institutional and Student Characteristics	
In-State Residence	
SAT Scores and HSGPAs	
Summary	
Research Question Two	
Graduation Rates	
Race: All HBCUs versus All PWIs	90

TABLE OF CONTENTS - continued

Race: Luapula College versus Luapula University	97
Race: Togo College versus Togo University	100
Class: An Economic Perspective	103
Gender: A Female Perspective	106
Gender: A Male Perspective	
Implications	109
Limitations and Implications for Further Study	
APPENDIX A	118
APPENDIX B	126
APPENDIX C	132
PEFFDENCES	135

LIST OF TABLES

Table 2.0, Historically Black Land Grant Institutions31
Table 4.0, Percent of High School Graduates65
Table 4.1, Percent of Four-Year College Graduates66
Table 4.2, Percent Below the Poverty Line68
Table 4.3, State Populations69
Table 4.4, African American Student Enrollment74
Table 4.5, Student Characteristics75
Table 4.6, Female Student Characteristics76
Table 4.7, Male Student Characteristics76
Table 4.8, All Institutions Graduation Rate Data78
Table 4.9, All Institutions Female Graduation Data79
Table 4.10, All Institutions Male Graduation Data80
Table 4.11, PWI Correlations82
Table 4.12, HBCU Correlations83
Table 5.0, Tuition and Fees90
Table 5.1, Sample of Matched In-State Land Grant HBCUs and PWIs91
Table 5.2, Luapula Institutions Graduation Rate Data98
Table 5.3, Togo Institution Graduation Rate Data101

LIST OF ILLUSTRATIONS

Figure 4.0, Gender of Students i	in Sample	71
Figure 4.1, In-State Residency:	HBCUs	72
Figure 4.2. In-State Residency:	PWIs	73

ABSTRACT

Retention, persistence and graduation rates are not new issues in higher education. Early research by Tinto (1975), Bean (1980), and Pascarella (1980) illustrated the importance of retention and the different methods by which it can be analyzed. These theories, although widely cited and read, account for less than 30% of the variance in departure rates (Astin, 1993). Much of the retention research on African American students has focused on utilizing dominant retention theories to investigate Predominantly White Institutions (PWIs) and Historically Black Colleges and Universities (HBCUs) in attempts to explain or explore the relationship between these students and the institutions (Cabrera, Nora et al., 1999; Person, 1990; Person and Christensen, 1996). The purpose of this study is to push the boundaries of the understanding of African American student retention. The expansion of these boundaries is accomplished in three ways: (1) providing institutions information to help facilitate the graduation of African American students, (2) providing a cross-sectional analysis of demographic characteristics of students at Historically Black Colleges and Universities versus Predominantly White Institutions, and (3) offering new perspectives on retention of African American students utilizing the institution as the unit of analysis. The goals of this project were accomplished by utilizing African American student culture as a lens for viewing the results of this research, a current retention model applied to African American students from a unique set of matched institutions.

CHAPTER 1

INTRODUCTION

Overview

Retention, persistence and graduation rates are not new issues in higher education. Early research by Tinto (1975), Bean (1980), and Pascarella (1980) illustrated the importance of retention and the different methods by which it can be analyzed. These theories, although widely cited and read, account for less than 30% of the variance in departure rates (Astin, 1993). Many efforts have been made to attempt to better understand and increase the amount of variance that is explained by these theories. Cabrera, Castaneda, Nora & Hengstler (1992) utilized a "convergence" between the theories of Tinto and Bean to better describe the issues of retention and persistence, while Bean and Vesper (1994) included gender in their discussion of educational satisfaction.

Other researchers interested in minority student persistence have explored the concept of minority integration and socialization into the collegiate environment (Murguia, Padilla & Pavel, 1991). Some minority-oriented researchers chose to explore concepts such as access and equity to frame their discussion of retention of minorities, its current status, and strategies for improvement (Neisler, 1992). Other researchers have built on current perspectives by choosing to compare retention related issues – academic preparedness, social adjustment and perceptions of prejudice – of African American and White students (Cabrera, Nora, Terenzini, Pascarella & Hagedorn, 1999; Fleming, 1984).

Much of the retention research on African American students has focused on utilizing dominant retention theories to investigate Predominantly White Institutions (PWIs) and Historically Black Colleges and Universities (HBCUs) in attempts to explain or explore the relationship between these students and the institutions (Cabrera, Nora et al., 1999; Person, 1990; Person and Christensen, 1996). Additional research explored the changes that happen specifically to African American students experienced on PWI and HBCU campuses. These changes included the reactions, adjustments, and needs of the students in terms of academic and out-of-class experiences (Pounds, 1987; Wright, 1987). Results of previous research suggested that there are problems in adjustment for African American students at any institution, but adjustment to campus life is more intense at PWIs. These problems, which include both social and academic interactions, can lead to students failing to persist and graduate (Person & Christensen, 1996; Pounds, 1987; Wright, 1987).

Research on African American students at Historically Black Colleges and Universities (HBCUs) often surrounds the issue of legitimacy (Bohr, Pascarella, Nora, & Terenzini, 1995; Davis, 1998; Jencks and Reisman, 1968; Person & Christensen, 1996; Redd, 1998). Merriam Webster's Collegiate Dictionary (1999) defines legitimate as "conforming to recognized principles or accepted rules and standards" (p. 655). For the purposes of this scholarship, research seeking to legitimize the purposes of HBCUs is the type that answers the question of what purpose HBCUs serve, if any, and do they serve a

duplicate purpose that can be accomplished at least as well by a PWI located elsewhere in the state or region.

A branch of the literature has accepted HBCUs as having a role or niche that is as legitimate as any educational institution. This area of literature utilizes an exploratory lens to investigate concepts that relate to the advancement of HBCUs and the students that attend these institutions (Garibaldi, 1984; Wagener and Nettles, 1998). It is this concept of accepting the role of HBCUs as legitimate organizations and developing a better understanding of the future of African American students and HBCUs that serves as the impetus for this research.

The literature suggests different types of institutions provide unique sets of living, learning, and developmental challenges for African American students (Fleming, 1984; Redd, 1998; Person & Christenson, 1996; Bohr et. al., 1995). These challenges—cultural, demographic, and ethnic—can affect the development and persistence of students (Fleming, 1984; Pascarella and Terenzini, 1993). One of the ways students are differentially facilitated toward graduation is by ethnicity (Astin, 1997). According to Fleming (1984), the goal of intellectual and psychosocial development with regard to African American students is that the development occurs. In other words, it is of more consequence that development takes place as opposed to where it takes place. It is this development of the student that should be the focus of the institution, administrators, faculty, and legislators.

Previous studies that provided a comparative analysis across institutional types often fueled debate about which type of institution was more effective at educating its students (Bohr et al., 1995; Cabrera et al., 1999) and therefore, desserving of additional funding and resources (Morse, Sakano & Price, 1996). That is not the goal of this project. This exploration, through the use of a comparative analysis, seeks to fill a gap in the literature with regard to graduation rates of African American studients attending HBCUs and PWIs. Additionally, this study provides an analysis of predicted and actual graduation rates — the proportion of students who should be graduating from an institution compared to those who actually did — that does not exist in the literature for HBCUs. It is not, however, the primary goal of this project to influence the decisions of future collegebound students. Rather the objective is to assist institutional researchers and administrators in enhancing existing learning environments with the purpose of increasing African American student persistence and graduation.

Purpose of the Study

The purpose of this study is to push the boundaries of the runderstanding of
African American student retention. The expansion of these bourndaries is accomplished
in three ways: (1) providing institutions information to help facilitate the graduation of
African American students, (2) providing a cross-sectional analyssis of demographic
characteristics of students at Historically Black Colleges and Universities versus
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African American students utilizing the institution as the unit of ænalysis. This was

accomplished by utilizing African American student culture as a lens for viewing the results of this research, a current retention model applied to African American students from a unique set of matched institutions.

HBCUs have been labeled as institutions where African American students are traditionally more successful (Davis, 1998; Fleming, 1984; Garibaldi, 1984; Pascarella & Terenzini, 1991). This study builds on previous research by utilizing a similar methodology with a different subject group. A recent study, The National Graduation Rate Study (Kroc, Howard, Hull and Woodard, 1997) analyzed graduation rates of public, Research I, AAU institutions in an effort to establish actual and predicted graduation rates while controlling for pre-college characteristics. The National Graduate Rate Study do not include on HBCUs; therefore, an extension of the study of graduation rates to HBCUs in general and African American students in particular will further understanding of the African American collegiate experience.

Significance of the Study

African American students account for approximately 1.5 million of the total students enrolled in higher education. Additionally, African American students are represented in all types of institutions from public to private, highly selective to open admissions (Redd, 1998; U.S. Department of Education, 1996). The majority of African American students now attend PWIs (Garibaldi, 1984) similar in ethnic makeup to the ones studied by Kroc, Howard, Hull, and Woodard (1997).

Based on the results of The National Graduation Rate Study (Kroc, et al., 1997), three findings provided the impetus for the current study. First, 22 of the 55 institutions showed African American students as the ethnic group with the lowest graduation rate. Second, African American students represented an average of 5% of the student body of the institutions in the database. Given the research of Fleming (1984) and Pascarella and Terenzini (1991), which suggested that institutions with higher numbers of African American students have more success with persistence and retention, this would seem reason enough for the poor graduation rate. Third, White students average graduation rate (54.1%) was 19.7 percentage points higher than the rate for African American students (34.4%) (Kroc et al., 1997). These data suggest an unacceptable rate of graduation for African American students in higher education.

With regard to persistence and graduation, African American students are not achieving at the same rate as their White counterparts, 45% to 57%, respectively (Chenoweth, 1999). However, the problem of retention for African American students is not one that can be solved by simply comparing retention rates of institutions (Astin, 1993). This research takes a two-pronged approach to exploring graduation and persistence. First, is an in depth discussion illustrating the characteristics of African American students at differing institutions. Second, is an analysis of graduation rates of African American students controlling for student differences. From this type of analysis, institutions can begin and continue to understand that the retention rate of an institution

for African American students is institutionally specific, and solutions for these students should not be developed based on ethnicity alone.

Conceptual Framework

Due to the interdisciplinary nature of this study, four frameworks were utilized to formulate an appropriate perspective. The following concepts were utilized in formulating the framework for this study: (1) differential characteristics of African American students at HBCUs and PWIs (Allen, Epps, & Haniff, 1991; Fleming, 1984; Pascarella & Terenzini, 1991); (2) African American student culture (Astin, 1968; Love, Jacobs, Boshini, Hardy, Kuh, 1993; Manning, 1993); (3) student success by type of institution (Allen, 1987; Astin, 1977; Pascarella & Terenzini, 1991; Tidball, 1980); and (4) factors that play a role in retention, persistence, and graduation rates (Bean, 1982, 1985; Pascarella, 1980, 1985; Tinto, 1975, 1987).

Differential Characteristics of African American Students at HBCUs and PWIs

Fleming (1984) utilized a cross-sectional analysis of both HBCUs and PWIs and, controlling for student differences, explored public and private institutions to determine academic (intellectual) and non-academic (psychosocial) differences between students attending a particular institution. From her research, Fleming was able to shed significant light on the issue of legitimacy with regard to HBCUs and African American students. Her research explored two distinct areas that will be utilized here, the intellectual and psychosocial development of African American students at HBCUs and gender

differences in the intellectual and psychosocial development of African American students at HBCUs and PWIs.

Fleming (1984) found that African American students at HBCUs possessed a variety of positive attributes that led to a higher level of satisfaction and intellectual development that were not common to African American students at PWIs. These attributes included a strong attachment to faculty, a higher level of satisfaction with their academics than their PWI counterparts, and a higher net improvement on academic performance measures. These data provided insight into the institutional differences that occurred and how they affected African American students.

Moreover, there were striking differences in the development of African

American men and women. Gender lines were apparent in the analysis of data from

Fleming's (1984) work. African American males seemed to benefit from attending

HBCUs compared to PWIs. African American males also showed higher levels of

assertiveness and "greater satisfaction with and positive outcomes from the educational

experience" (Fleming, 1984). The reverse was true for African American men attending

PWIs. These individuals scored lower on performance measures and had lower levels of

satisfaction.

Results for African American females, however, were different. Fleming's (1984) work showed higher levels of intellectual development for African American women at PWIs. Fleming established this connection by observing the higher number of African American males at HBCUs. In other words, with the increased number of African

American males, African American females experienced negative effects such as frustration and higher levels of dissatisfaction that affected their intellectual development at HBCUs. Fleming further suggested that this dissatisfaction was a result of some women relegating themselves to a "traditional" position and the African American men engaging in dominant patriarchal activities. The levels of dissatisfaction and negative affects to intellectual development were not as pronounced at PWIs.

From Fleming's (1984) research, it is clear that HBCUs do indeed serve a unique purpose that PWIs do not, particularly in the areas of intellectual and psychosocial development of African American students. Fleming showed that there were significant gender differences in the effects of both HBCUs and PWIs on students. Fleming's results in each of these areas—intellectual development, psychosocial development and corresponding gender differences—suggested that institutional makeup was indeed a factor in the development of African American students.

According to Fleming (1984) African American students were different from other students, although similar in ideals with regard to the pursuit of knowledge. Fleming suggested a variety of other differences that seemed to be a result of the type of institution the student attended. These concepts lay a foundation from which this research explores persistence and graduation. Using Fleming's work as a lens through which to view the results of this study will help to illustrate the unique concerns of African American students.

Student Culture: An African American Student Perspective

Student culture within higher education has been defined as those characteristics that exert an influence on the educational environment (Davis, 1998; Kuh & Hall, 1993). The influence of culture can be exerted by the institution (Manning, 1993) or the student (Love, Jacobs et al., 1993). Although each of these types of characteristics, student and institutional are sources of influences, they affect each other and themselves in a variety of ways (see Chapter 2) (Davis, 1998; Kuh & Hall, 1993; Love, Jacobs et al., 1993; Love, Kuh et al., 1993; Manning, 1993).

Outside of higher education, culture has been further described as a result of the totality of an individual's experiences (Van Manaan & Barley, 1985). Factoring in an African American perspective, Brown (1963) suggested an individual's culture cannot be understood outside of its own "social or cultural context" (p. 15). It is this researcher's belief that the retention of African American students has often been studied, researched, and discussed from an incomplete perspective. In other words, African American students are often observed as a part of a culture they do not belong to; or by researchers, attempting to utilize an African American perspective — a perspective they do not completely understand (Brown, 1963; Woodson, 1933). As a result "the African American culture is often inadequately depicted in higher education research, or our cultural perspective is often altogether missing" (Freeman, 1998, p. 1).

This work utilizes the concept of culture in general and that of African American students in particular. This perspective serves as a lens through which to view and

appropriately analyze the results of a retention study focusing on African American students.

Love, Jacobs et al. (1993) described the following three types or levels of student culture: National, Institutional, and Intra-Institutional. The National perspective includes those aspects of culture that were common to most if not all students (e.g. registration, financial aid, meeting new people). The Institutional aspects were those that did not expand beyond those students attending the institution. Examples of institutional aspects of culture would include phrases or activities utilized or engaged in by students who were particular to that institution. The Intra-Institutional level referred to the student subcultures, peer groups, and culturally marginalized groups of an institution (Love, Jacobs et al., 1993).

Institutional culture, as described by Kuh and Hall (1993) and Manning (1993), provides a framework for understanding that institutions possess an individual identity that exerts an influence on the faculty and students at the institution. Additionally, student culture, as defined by Love, Jacobs et al. (1993) and Davis (1998), illustrates how students can be separated into groups or subcultures that interact differently with institutions dependent upon the perspective of the group(s). These two concepts, Institutional and Student Culture, establish the idea that institutions have individual identities and those in attendance at each of these institutions are groups or subcultures that have specific needs.

Love, Jacobs et al.'s (1993) concept helps to frame the discussion of persistence and graduation through the defining of subgroups. Based on their description, African American students at PWIs belong to a subgroup or subculture, a subculture, as further discussed in Chapter 2, that has particular needs, characteristics, and methods of relating to and interacting with the institution. Combining Love, Jacobs et al.'s ideas of culture with particulars of Brown's (1963) ideas on individualized culture further frame the concepts used in this study.

African American students, whether at HBCUs or PWIs, are unique sets of individuals who are potentially more differentiated by the institutions they attend.

Incorporating the ideas of Love, Jacobs et al. (1993) and Brown (1963) into the analysis of the data assisted in the further illustration of the different challenges faced by African American students.

Student Success By Type Of Institution

In their discussion of institutions with different racial compositions, Pascarella and Terenzini (1991) suggested African American students attending PWIs experience higher levels of personal dissatisfaction, institutional disconnect, racism, and isolation. This position is supported throughout the literature (Allen, 1987; Allen, Epps, & Hanniff, 1991; Davis, 1998; Fleming, 1984; Roebuck and Murty, 1993). African American students at HBCUs due to the nature of a more homogeneous student body, tend to experience lower levels of personal dissatisfaction, institutional disconnect, racism, and isolation (Allen, 1987; Fleming, 1984). Pascarella and Terenzini (1991) hypothesized

that attending an HBCU could enhance the educational persistence of some African American students. This hypothesis is supported not only by research on African American students controlling for student background and pre-college characteristics (Astin, 1975; Cross & Astin, 1981) but by literature discussing the psychosocial dimensions as well (Astin, 1975; Cross & Astin, 1981; Fleming, 1984; Roebuck & Murty, 1993).

Generally speaking, there are two themes in the literature that attempt to explain why African American students tend to be more successful at HBCUs. The first suggests that HBCUs do not possess the academic rigor or educational resources – funding for research, "high quality" faculty, extensive library volumes, etc.—of PWIs; therefore, achieving educational goals may not be as challenging for the student at an HBCU (Bowles & Decosta, 1972; Sowell, 1972). The second suggests that supportive social and cultural resources are responsible for the student success (Davis, 1998; Fleming, 1984; Garibaldi, 1984). Researchers controlling for institutional characteristics such as selectivity and financial resources have suggested African American students receive better grades at HBCUs (Pascarella, Smart, & Stoecker, 1989). This lends credence to the concept of social and cultural resources being instrumental in student success.

Other investigations of homogeneous institutions revealed similar results.

Literature investigating educational attainment at single-sex (women's) institutions suggested that there are positive direct and indirect effects of attending an all women's institution. Similar to research on HBCUs, these results come from investigations

detailing student background and pre-college characteristics in acidition to social and psychosocial domains (Astin, 1977; Fleming, 1984; Pascarella & Terenzini, 1991; Tidball, 1980). Consequently, there are educational attainment beenefits to attending an institution where the institution maintains a homogeneous studenat body and the student is a member of that majority.

Of particular use for this research is the concept of institutional quality as it relates to education attainment, persistence, and eventual graduation. Quality, for the purposes of this research and in the literature examined, generally includes one or more of the following measures: percentage of faculty with a Ph.D., institutional resources, selectivity of student body, and library holdings (U.S. News and World Report, 1999). In their review of research surrounding the issue of quality and educational attainment, Pascarella and Terenzini (1991) suggested that the literature tends to confirm that there are significant advantages to attending an institution of high quality. Various methods of investigations including those controlling for student backgrouned and pre-college ability, have been utilized and suggested "that traditional indexes of institutional quality significantly enhance institutional persistence and educational attainment" (Pascarella & Terenzini, 1991).

These two concepts, institutional quality and institutional ethnic homogeneity, when viewed through the perspective of this research, present am interesting dichotomy.

The institutions explored differed greatly by institutional type with regard to ethnic makeup, ranging from 3.9% to 90% African American. This besing the case, the research

American students than their counterparts, controlling for student differences. Research on quality of institution, however, suggests the PWIs should have superior rates of graduation, controlling for student differences. This research represents a unique exploration of differing types of institutions, each with distinct advantages and disadvantages, with regard to the educational attainment of African American students. The results of this research are beneficial and applicable to institutions of either type.

Factors that Play a Role in Retention, Persistence, and Graduation Rates

Much of the research that has been done on retention and persistence stems from the work of three influential theorists: Pascarella (1980), Tinto (1975, 1987), and Bean (1980, 1982). Each of these theorists looked at persistence from the perspective of the students that remained at an institution. Additionally, although the theorists incorporated institutional factors and looked at the interaction of students and institutions, the onus, from their perspective, seemed to be with the student and the characteristics he or she possessed that aided in persistence and graduation. This perspective, that of the student as the unit of analysis, does not take into account the institutional responsibility in graduation and persistence.

According to Pascarella (1980), graduation and persistence are the results of effort by the student. This effort and the quality of it are influenced by student characteristics.

These student characteristics interact with the institutional environment and effect the effort put forth by the student. Specifically, Pascarella suggested that four sets of

variables (pre – college characteristics, structural and organizational characteristics, interaction between students and others, and quality of interaction with the institution) interacted to directly or indirectly affect the persistence of students.

Tinto (1975, 1987) described persistence as the interaction of four variables: student motivation defined as the students desire to persist and graduate; student academic ability as illustrated by high school grades in addition to national test scores (ACT or SAT scores), institutional academic characteristics, and institutional social characteristics. Additionally, Tinto acknowledged the importance of institutional commitment to persistence. He, therefore, reinforced the concept that there is a direct relationship between the two variables that must be considered in the persistence efforts of institutions.

Bean (1980, 1982) described persistence as a result of intent, the desire to continue on toward eventual completion and graduation. Intent, as Bean (1980) described, is manufactured in part based on external factors. These external factors interact with the beliefs and attitudes of the student and affect the persistence and graduation of the student. Bean also described fit as an integral part of the persistence equation. Fit, according to Bean, is a result of involvement in extracurricular activities, relationships with other students, and out-of-class contact with faculty.

The research on retention tends to be based primarily on White students at

Predominantly White Institutions. Research relating specifically to African American
student retention issues does, in part, pattern itself on the seminal research of the

aforementioned theorists; however, there are some distinct differences. Research relating to African American students weighs more on factors of motivation; it also addresses cultural and social issues (Bohr et al., 1995; Davis, 1998; Fleming, 1988; Person & Christensen, 1996). This literature relating to African American students is discussed in more depth in Chapter 2.

Research Questions

In accordance with the primary and secondary purposes of this research, I ask the following research questions:

- 1. What differences, from a demographic perspective if any, exist between African American students attending Predominantly White Institutions and Historically Black Colleges and Universities?
- 2. Controlling for background characteristics, how do expected and actual graduation rates differ between HBCUs and PWIs?

These questions were answered using a two-pronged analytical approach. Descriptive statistical analysis of the data explored the potential differences in demographics between HBCUs and PWIs. Inferential statistical analysis provided insight on differences, if any, of graduation and persistence rates between and among the HBCUs and PWIs being studied

Limitations of the Study

Due to the limited sample size, institutions with markedly different student and institutional characteristics may exist; care should be taken in generalizing results.

Furthermore, due to the cross-sectional and quantitative nature of this study the plethora of reasons for persistence and graduation rates are not specifically addressed and can only be approximated or assumed based on the literature. Finally, because this study focuses on students at four-year institutions, the findings may not be generalizable to African American students at all types of institutions.

It should be noted, however, that this study provides a significant contribution to the literature by researching an area that has not been fully explored. In addition to pushing the boundaries in the understanding of retention, this study provides opportunity for further research, which will consequently lead institutional leaders to look at their institutions as individual environments with similar problems that may require unique solutions.

Summary

There are approximately 1.5 million African American students enrolled in higher education. These students have an expected retention rate of 45% nationally.

To bring this number more in line with their White counterparts (57%), new perspectives on retention must be utilized (Chenoweth, 1999). This research represents a step in that direction. Utilizing the institutions as the unit of analysis, this exploration provides a deeper understanding of the retention issues facing institutions. Additionally, the evaluation of student demographics from Historically Black and Predominantly White Institutions begins to illustrate that the individuality of these institutions should be based on more than ethnicity.

CHAPTER 2

REVIEW OF RELEVANT LITERATURE

Four bodies of literature are useful in helping to frame the discussion of African American students and retention. The research done on (1) Historically Black Colleges and Universities; (2) African American students; (3) student culture and (4) retention, persistence, and graduation rates. Literature on HBCUs and African American students provides a frame of reference for understanding the differences and similarities between HBCUs and PWIs and the differences between African American students and White students. This literature also provides a historical context that is useful in explaining similarities and differences between both types of institutions (HBCUs and PWIs) and African American and White students.

Historically Black Colleges and Universities

African American Students

At this juncture, it is important to provide a working definition of the term HBCU. Because there is no formal criteria for becoming an HBCU, this study utilizes the definition expressed by Garibaldi (1984). An HBCU will refer to an institution whose purpose at inception was the education of African Americans. This definition does not address the current or historical ethnic makeup of an institution. In other words, an institution need not be currently ethnically dominated by African Americans to be or continue to be an HBCU.

The research on HBCUs and African American students tends to fall into three distinct categories, the research done on (1) historical characteristics, (2) legitimacy, and (3) exploring the future concerns of areas of student need and paths to be taken by HBCUs.

Considering the purpose of this research, it is difficult to separate the historical literature of HBCUs from the historical literature on African American students.

Realistically, they are often one in the same. This connection between HBCUs and African American students is a result of students of color being legally barred from attending PWIs, particularly in the South. As a result, African America students began to enroll in HBCUs, and their increased desire for higher education facilitated the establishment of more HBCUs (Redd, 1998). Because an overwhelming number of African Americans historically attended HBCUs, the discussion of the literature relating to HBCUs and African American students is combined. There is, however, a handful of African American students who attended PWIs both prior to and after the establishment of HBCUs. These individuals are discussed within this section as well.

The History

African American students in higher education have traveled a road filled with a variety of roadblocks. These roadblocks have appeared in many guises and typically are products of a historically racist and segregated society. The first African American college graduate was John Russwurm. In 1826, he received his degree from Bowdoin College in Maine. Over the span of 20 years, seven other African Americans graduated from various colleges. At the onset of the Civil War, in 1860, the number of African

American graduates from HBCUs and PWI combined was 28 (Johnson, 1969). The mid to late 1800s saw the timid beginnings of higher education for Blacks in America, illustrated by the three Historically Black Colleges having i been established by the conclusion of the Civil War—Cheyney, 1854; Lincoln, 1854; Wilberforce, 1856 (Davis, 1998; Garibaldi, 1984). This modest number is brought further into perspective by the realization that there were close to four million newly freed slaves in the United States and 400,000 Blacks who were free prior to the conclusion of the Civil War. None of these individuals possessed formal education beyond high school (Davis, 1998; Branson, 1978).

The demand for higher education remained throughout these modest beginnings. As a result of this demand, political pressures and judicial acts like Plessy v. Ferguson (1896), which helped usher in a system of separate but equal education, and legislation like The Morrill Land Grant Act of 1890 (The 2nd Morrill Act), 17 Black Colleges were established (see Table 2.1). A separate legislative act, The Morrill Land Grand Act of 1862 (The 1st Morrill Act), did very little for Blacks seeking to participate in higher education. The Morrill Act of 1862 authorized funding for the educating of low to middle income students and granted this funding overwhellmingly to institutions that were White only. The 1st Morrill Act did not preclude African Americans from participation, in fact some states—Mississippi, Virginia, South Carolinan, and later Kentucky—divided the 1862 funds between the HBCUs and PWIs within their states. The exclusionary tactics were those of the states which utilized custom, tradition, and legislation to prevent

African Americans from benefiting from monies from the 1862 Morrill Act (Johnson, 1969).

Table 2.0 Historically Black Land Grant Institutions

Institution	Founding Date as a Land Grant Institution
Lincoln University	1866 (established 1854)
Alcorn State University	May 13, 1871
University of Arkansas at Pine Bluff	1873
Alabama A&M University	May 1, 1875
Prairie View A&M University	August 14, 1876
Southern University and A&M College	April 10 1880
Tuskegee University	Febuary 12, 1881
Virginia State University	1882
University of Maryland - Eastern Shore	September 13, 1886
Kentucky State University	1886
Florida A&M University	October 3, 1887
North Carolina A&T State University	March 9, 1891
Delaware State University	March 18, 1891
Fort Valley State University	1890
Langston University	March 12, 1897
Tennessee State University	1912
South Carolina State University	March 3 1986

The second Morrill Act mandated that states that utilized the philosophy of "separate but equal" education establish at least one land grant college for African American students with funding equal to its white counterpart (Davis, 1998). The first

land grant college established for African American students under the second Morrill Act was Alcorn State University. Originally established as Oakland College, a Presbyterian school for White males, it was forced to close during the Civil War due to a lack of students. The State of Mississippi purchased the land, and the institution was renamed Acorn University after then Governor James L. Alcorn. Hiram R. Revels was installed as the first President. It should be noted that the founding dates (see Table 2.1) are the dates the institutions were recognized by the states as educational institutions and that these dates may differ from the dates the institutions were purchased or built and opened their doors to students.

Although the institutions established under the 1890 Morrill Act were to receive an equal portion of funding relative to institutions established under the first Morrill Act, this was rarely the case. Inequitably funded, these institutions often had to rely on Black churches, and White philanthropies to survive (Redd, 1998). Organizations like the Freedman's Bureau, Black churches and White philanthropies helped to establish institutions including Howard University (Washington D.C.), Clark-Atlanta University (Georgia), St. Augustines' College (North Carolina), Fisk University (Tennessee), Johnson C. Smith University (North Carolina); and Tougaloo College (Alabama) (Davis, 1998; Redd, 1998).

These fledging institutions were responsible for a significant contribution of formally educated Blacks in America. In the early 1900s, these institutions, or Normal

Schools as most were called, accounted for the certification of over half of the African American teachers across the country (Redd, 1998; U.S. Department of Education, 1996).

Significant curricular changes by Historically Black Colleges were made during the 1910s and 1920s. As a result, the number of African American graduates more than doubled from 787 in 1,910 to 2,002 in 1920 (Johnson, 1969). Professional schools in the arts of dentistry, medicine and pharmacy were also established at both Meharry Medical College and Howard University prior to 1920. During this period, Howard University also began to offer law degrees (Redd, 1998).

The professions were not the only areas of expansion during this phase in Black College development. Many institutions exchanged their teacher education programs for offerings in liberal arts and the sciences. Additionally, for the first time, many of these institutions began to offer college degrees in addition to teaching certificates. These changes, like others taking place at Predominantly White Institutions around the country, were in large part driven by the return of World War I veterans who desired education beyond the secondary level (Redd, 1998).

The 1920s through the 1950s were a period of great growth and dynamic change for Black Colleges. Nearly 14,000 African American students were enrolled at 77 Black Colleges by 1927. Throughout the 1930s, in stark contrast to the economic depression facing the country, both enrollments and expenditures at Black institutions grew at an accelerated pace, 66% and 100%, respectively (U.S. Department of Education, 1996). Expansion continued during the 1940s, spurred on by the enrollments of World War II

veterans, who accounted for nearly one-third of total enrollments. By the mid – to - late 1940s, Historically Black Colleges and Universities were responsible for producing 97% of all Black college graduates (Davis, 1998; Redd, 1998).

The 1950s-1970s saw sweeping changes for HBCUs. Legislation and court cases directed at segregation, funding, and civil rights provided the impetus, the funding, and the legal backing that facilitated continued growth in the numbers of African American students attending college (Nuss, 1996). The U.S. Supreme Court ruling in 1954, Brown v. Board of Education of Topeka, Shawnee County, Kansas established the unconstitutionality of the "separate but equal" doctrine (Roebuck & Murty, 1993). This decision, in addition to the Civil Rights Act of 1964, gave the Attorney General the authority to file suit against institutions on the behalf of African American plaintiffs. This ruling helped to bring about significant enrollment shifts in the African American student population (Roebuck & Murty, 1993). This change in enrollment resulted in increases in the numbers of African American students at Predominantly White Institutions.

The Higher Education Act of 1965 was also instrumental in the development of African American students. As a result of this Act, of students were given the funding that allowed them to choose the institution that they thought best suited their needs. This funding came by way of federal grants in addition to student loans (Nuss, 1996; Roebuck & Murty, 1993).

The 1980s and 1990s were also a time of change for HBCUs. Changes in enrollment again took place with enrollments increasing significantly over this time frame (Redd, 1998). According to Redd the growth in enrollment was in large part due to the influx of two new groups of students, women and White students. Throughout the 1980s and into the 1990s these two groups of students were primarily responsible for the growth of enrollments at HBCUs with increases of 41% for White students and 71% for women (Redd, 1998).

Additionally, legislative changes provided the impetus and/or the funding for changes at HBCUs as well (Davis, 1998; Roebuck & Murty, 1993). Title III of the Higher Education Act of 1986 provided \$100 million to be used by HBCUs. This money was allocated primarily in an effort to attempt to bring many HBCUs in line with their counterparts resulting from a historical pattern of underfunding (Redd, 1998; Roebuck & Murty, 1993).

Not only enrollment and legislative changes affected HBCUs and Black students; judicial decisions affected them as well. The Supreme Court ruling on United States v. Fordice in June of 1992, in sum stated that Mississippi was not fostering equality among the institutions in its system. The court further stated that the elimination of legislation that prevented African American students from attending PWIs was required (Roebuck & Murty, 1993). As a result of this decision, HBCUs and PWIs were in the interesting position of once again having their futures structured by judicial decisions. According to

Roebuck and Murty (1993), this decision could have led to the closing or restructuring of HBCUs based on the duplication of programs and courses at these institutions.

Legitimacy

Since the Supreme Court decision in Brown v. Board of Education (1954) and United States v. Fordice (1992) which suggested Mississippi was operating a two - tiered educational system based on racial inequities, a significant amount of the literature about HBCUs has surrounded the question of legitimacy (Bohr et al., 1995; Brazzell, 1996; Fleming, 1984; Lang & Ford, 1988; Morse et al., 1996; Redd, 1998; Thompson, 1998). These legitimacy concerns can be summarized in the question "Are HBCUs still needed now that African American students have the legal right to attend any institution they choose?" Included in this discussion are issues of duplication, that is, should HBCUs with duplicate programs and course work continue to be funded?

Fleming (1984) illustrated that HBCUs serve a role in the education of African American students both in the cognitive and psychosocial domains that are not being served at PWIs. Fleming looked at African American students at different types of institutions located in the northern and southern areas of the country. In her model, Fleming, controlling for student differences, utilized a cross-sectional design comparing cohorts of freshmen and seniors at HBCUs and PWIs to determine intellectual and psychosocial differences of students attending these institutions. Fleming found significant gains for African American students at HBCUs in the areas of concept

formation and critical thinking. The African American students enrolled at PWIs had no statistically significant gains on these measures.

Within each type of institution, however, Fleming (1984) found differences along gender lines. African American males had the largest developmental gains at HBCUs. The reverse is true for African American males at PWIs. As Fleming stated "Clearly Black males are hardest hit by the stress of interracial educational environments" This phenomenon is attributed to a variety of issues including racism, competition, and depression. Fleming's research at HBCUs suggested that these effects are a result of male-to-male competition on an ethnic scale. As a result of this competition, African American males are relegated to a subdominant role at PWIs. This subdominant position is enforced and reinforced by their small numbers and lack of visibility.

With reference to the African American women in Fleming's (1984) study, the issues tended to surround competence rather than competition. Fleming's research suggested that African American females often set lower goals than their male counterparts and tended to experience more frustration and dissatisfaction with their own performance, particularly those attending HBCUs. The frustration and dissatisfaction, according to Fleming, seemed to be related to the number of African American males at the institution. This information led Fleming to hypothesize that African American women were not asserting themselves "so that they can maintain the approval of men".

The outlook for African American women did not appear as grim at the PWIs studied by Fleming (1984). At PWIs, the African American women tended to develop

many more positive attributes. Interpersonal skills and verbal communication showed marked gains for African American women attending PWIs. Additionally, African American women received a higher return on their intellectual experience than African American men at PWIs as noted by the differences in intellectual performance measures (Fleming, 1984).

Other researchers have explored the legitimacy of HBCUs from the perspective of student outcomes (Bohr et al., 1995; Jackson & Swan, 1991). Bohr et al. suggested that there were significant learning advantages for African American students at HBCUs and, in sum, agreed with the previous research of Fleming (1984). Jackson and Swan (1991) found predictors of student success at HBCUs tended to be more of the academic type, while at PWIs predictors were more of a social type. This research suggested that although HBCUs would do well to develop programs in the academic arena to assist students, there existed a unique social environment that could be important in the success of African American students that was not duplicated at PWIs.

In research by Morse et al. (1996), the legitimacy of HBCUs was viewed through an economic lens. Morse et al. looked at the economic impact of three institutions in North Carolina, one of which was an HBCU. The results of their research illustrated that each of the institutions had a significant economic impact and that North Carolina A&T, an HBCU, generated the highest amount of surplus per dollar of appropriations.

Furthermore, they suggested that the voluntary sorting of individuals into homogeneous institutions was "welfare-increasing" (welfare in this sense refers to the net or overall

social welfare) and "valuable to society". Additionally, they suggested that if other HBCUs were similar in their economic impact to the state or community, significant losses in efficiency of education and contributions to the net welfare of the state would result with closings or mergers of HBCUs with PWIs (Morse et al., 1996).

Future Concerns

Some authors have taken the perspective that the future of HBCUs deserves the time and effort of researchers more than the past. These researchers' work is based on the premise that HBCUs have served a legitimate purpose and have a niche that is unique and sorely needed in the arena of higher education. This group of researchers also suggested that the future of HBCUs lie in the expansion, reinforcement and adjustment of their already unique missions (Garibaldi, 1984; Monroe, 1994; Prestage, 1984).

One of the methods by which the position of HBCUs can be reinforced is through graduate education. In a review of African American graduate students and graduate — degree - granting HBCUs, Prestage (1984) recommended that three main areas of focus be taken into consideration. The first included creating and/or maintaining the largest possible pool of potential graduate students. It is her view that HBCUs have in the past and should continue to admit high-risk students. Additionally, Prestage suggested that HBCUs accept the challenge of preparing these high-risk students for life in general and graduate school in particular.

Prestage's (1984) second area of focus was the continued development and cultivation of relationships between HBCUs and graduate programs at PWIs. The benefit

of this type of relationship is two-fold. Initially, it gives undergraduate students direct ties to graduate studies. Secondly, it provides an opportunity for HBCUs to learn and develop quality graduate education as well.

This leads into Prestage's (1984) third area of focus, the development of graduate programs at HBCUs. In her view, the development of graduate programs, particularly Ph.D. programs, must take place at HBCUs if the production of African American doctorates is to increase. In her research, she suggested three key factors in the development of the Ph.D. programs at HBCUs: (1) illustrate the "universal implications of significance" of HBCUs to graduate education; (2) affiliate with professional organizations; and (3) establish, facilitate and cultivate financial assistance for African American students to pursue doctorate.

Another concern of researchers as they looked to the future of HBCUs and African American students was the direction of the research emanating from HBCUs. Of particular concern was the concept of African Americans researching the problems that affect African Americans (Monro, 1984). Monro, in his discussion, illustrated the need for what he termed "Black-Controlled Research". He based his discussion on the lack of Black input through the avenues of research and policies. Monro suggested that at every educational level, from primary through graduate education, the education of African Americans have been primarily structured by White standards and perceptions. Monro's suppositions were further supported by this author's comprehensive review of the literature revealing the majority of widely cited research on HBCUs and African

American students does not come from HBCUs. Correspondingly, other researchers suggested that although research on issues dealing with the African American experience are important, it is also of use to explore areas of research that include science, technology, medicine, engineering, etc. (Branson, 1978; Fleming & Morning, 1998; Thompson, 1998).

Each of the aforementioned research findings informed this work and guided the study by providing a foundation for how HBCUs affect students. The results of previous research suggested the development and persistence of students by providing a social environment conducive to education (Fleming, 1984; Jackson & Swan, 1991). Earlier researchers Morse et al. (1996) also provided illustrations on how HBCUs affect society from an economic perspective, suggesting HBCUs benefit society as a whole as "welfare increasing" institutions (Morse et al., 1996). The results of this research can be viewed through both the improvement of the educational social environment lens and the economic perspective.

Student Retention, Persistence and Graduation Rates in Higher Education

The literature on retention in higher education stems from a variety of areas, two of which are the focus here, research done on (1) investigating models of departure and (2) graduation rates — expected and actual — of students in higher education. The initial discussion in this section summarizes well-known models of departure. The second portion details more recent work on graduation rates and persistence.

Research on Models of Departure

Pascarella (1985), building on the previous work of Chickering (1974) and Tinto (1975), suggested that college student persistence is a result of four functions: (1) precollege characteristics, (2) structural and organizational characteristics of the institution, (3) interaction between students and other students or faculty, and (4) quality of interaction with the institution.

The interaction of these variables, whether direct or indirect, has an impact on students and their intent to persist, according to Pascarella (1985). Similarly, he stated that ignoring structural and organizational characteristics of an institution because they tend to affect students primarily in an indirect fashion is "premature" due to a lack of research on how institutional factors affect student success. A major criticism of Pascarella's (1985) work is its inapplicability to minority students. This inability to ascertain the effect on minority students left a gap in the literature.

Tinto (1975, 1987) utilized an interactional model to explore student attrition.

Tinto (1975) suggested that student attrition is a function of the interactions of both student and institutional characteristics. In an analysis of African American retention issues, Tinto suggested differences in pre-college characteristics were primarily responsible. Although criticisms of Tinto's work included the role external factors play in student attrition (Cabrera et al., 1992) it is widely tested and utilized by researchers who have supported the model's validity.

Tinto (1987) proposed that the match or fit between student motivation, academic ability and the social and academic characteristics of an institution shaped the student's commitment to an educational goal at the institution. It is this commitment that causes the individual to stay and develop purpose and commitment.

Bean (1980, 1982, 1985) and Bean and Vesper (1992) viewed student persistence from an organizational point of view. Bean (1980) suggested organizations affect persistence behavior. The characteristics of an institution (e.g. class size, cost, faculty with Ph.D.) affect the beliefs of a student, which affect the attitude and, in turn, the behavior or intent to persist (Bean, 1980, 1982; Bean & Vesper, 1992).

The Bean (1980) and Bean and Vesper's (1992) model also illustrated the role external factors play in affecting persistence. In sum, the organizational theory presented by Bean and associates suggested a role is played by organizational, personal, and environmental variables on the intent of a student to persist (Cabrera et al., 1993).

The research mentioned above incorporates two basic sets of variables that affect student retention, persistence and eventual graduation, pre-college (student) characteristics, and at-college (institutional) characteristics. The researchers to be discussed below accept that pre-college (student) characteristics play a role in student success and place a larger portion of the responsibility with the at-college (institutional) characteristics. Their investigations centered on minority and African American students and they suggest the issue of retaining and graduating these students is one that rests primarily with the institution.

Wilkerson (1988), utilizing research directed particularly at African American students in The Black Collegian Advisement Program at Kennesaw College, suggested the importance of strong institutional commitment to change in addition to "top-down commitment from the President and her staff." The program in place at Kennessaw included a variety of campus - wide activities designed to bridge the gap between the institution, the student, and the community. As a result of the coordinated efforts of the staff, administration, and faculty, students problems were identified earlier and workable solutions were implemented.

Levin and Levin (1991), in an examination of retention programs, stated that atcollege experiences carried more of an influence than pre-college characteristics. These
at-college experiences included (1) the living environment, (2) classroom experience, (3)
academic advising, (4) extracurricular activities, (5) financial support, and (6) faculty
involvement. Positive experiences in these areas suggested a correspondingly similar
experience with peers and faculty. It is this type of experience, according to Levin and
Levin (1991), that assists in facilitating the retention and emotional graduation of
individuals through creating a sense of community and commitment to the institution.

In their analysis of retention programs, Levin and Levin (1991) clearly stated the importance of faculty involvement for minority students. This involvement can place students in the position of being more comfortable during in and out-of-class interactions. Additionally, they suggested optimal faculty involvement includes interaction with

retention - oriented staff members; this allows the student to be further included into the fabric of the institution.

In a more recent work, Somers, Hall, Cofer, and Patten (2000) utilized a national data set, The National Post-secondary Student Aid Study (NPSAS), to investigate persistence and African American persistence. Using as a dependent, dichotomous variable – Within-Year Progression — Somers et al. investigated how background, college experience, and price/debt variables would affect within-year progression of African American students. Somers et al.'s results revealed that the background variables — gender, under twenty-two, over 30, high income, low income, dependent, married, mother-college experience, father-college experience — had no impact on the within-year progression. College experience variables, however, did have an influence on within-year progression of students. These college experience variables included student classifications (sophomores, juniors, or seniors), housing (on-campus, off-campus), and whether students attended full time or part time. Each of these variables positively influenced persistence.

Early researchers (Bean, 1980; Bean & Vesper, 1992; Pascarella, 1985; Tinto, 1975, 1987) suggested organizational and personal variables affect student persistence. Building on the work of these researchers minority student retention researchers, suggested that pre-college (student) variables had less and sometimes little to do with persistence (Levin & Levin, 1991; Somers et al., 2000). Further, in an evaluation of Tinto's (1975) theory of college student departure, Braxton, Sullivan, and Johnson (1997)

investigated a variety of research models used to test whether pre-college characteristics of African American students affected persistence. Their results suggested pre-college characteristics have little to do with the persistence or success of African American students. As an extension of these works, this study controls for student pre-college characteristics and observes institutional influence on retention, persistence, and graduation rates.

The Research on Graduation Rates

Astin (1993), in response to a law requiring institutions to report graduation rates developed a regression equation to assist institutions in evaluating their own graduation rates. Utilizing a sample of 365 baccalaureate-granting institutions, Astin collected data for over 50,000 students. Graduation rates were then calculated based on student characteristics. Astin (1993) found that four variables accounted for the majority of the variance: high school grades, admissions test scores, sex, and race.

Howard, Woodard, and Kroc (1994) extended Astin's (1993) work by adapting it for a study of public, land grant, Research I universities. In addition, Howard et al., (1994) included institutional variables (acceptance rate, percent of students in top 10%, percent of students from in state, etc.) to attempt to increase the predictability of the model. In a further attempt to increase the predictability of the model, Howard et al. (1997) utilized both linear and logistic regression techniques. The incorporation of logistical techniques improved the predictability of the model, particularly at the ends of the distribution. Results showed that controlling for student differences, some

institutions were over-performing, that is, graduating at higher than expected rates, while others were under-performing.

The previous studies on retention provide a model that guided this work.

Investigating HBCUs and African American students utilizing similar techniques builds on the work of Howard et al. (1994) and further extends the work of Astin (1993).

Student Culture

Institutional and student characteristics that exert an influence on both the student and the educational environment help to define the culture of both the student and the institution (Davis, 1998; Kuh & Hall, 1993). This sense of culture can be institutionally specific (Manning, 1993) or particular to the student and his/her interaction with the institution (Love, Jacobs et al., 1993). For the purposes of this work, the student perspective is utilized.

Love, Jacobs et al. (1993) described three different types or levels of student culture: national, institutional, and intra-institutional. The national perspective included those aspects of culture that were common to most if not all students (e.g., registration, financial aid, meeting new people, etc.). According to Love et al., having to perform similar tasks gave students a shared experience regardless of whether they were students at the same school or in different regions altogether.

Love, Jacobs et al. (1993) suggested that student culture at an institutional level referred to those aspects that did not expand beyond those students attending the institution. Examples range from phrases and terms used to reference places to hang out

(Mill Avenue, Arizona State University; Fourth Avenue, University of Arizona; The Village, Grambling State University) to mass student participation rituals (The Nude Olympics, Purdue University; Dolphy Day, Le Moyne College). Student culture at an institutional level was not defined or considered more or less valid according to its congruence with institutional values. Additionally, Love, Jacobs et al. suggested that at the institutional level, student culture was an aspect of the student experience that assisted in providing a viable connection to the institution.

The intra-institutional level of student culture as described by Love, Jacobs et al. (1993) referred to three specific sections of the student populace: (1) student subcultures, (2) peer groups, and (3) culturally marginalized groups of an institution. Each of these areas, although a sub-section unto itself, was described by Love, Jacobs et al. with separate levels of sophistication.

Love, Jacobs et al. (1993) described individuals within a subculture of an institution as those who shared beliefs and values that translated into distinct identifiable behaviors. Often these subcultures can be differentiated by their living environments.

Those individuals within the Greek letter organizations and living in fraternity or sorority houses are perhaps the clearest example. Other examples could include honors students or athletes living in selective or alternative housing environments.

Peer groups were the second area of intra-institutional level culture that Love,

Jacobs et al. (1993) discussed. Peer groups within the culture of an institution can be
established by three factors: (1) time—a class or study group, (2) location—a residence

hall or floor, and (3) activity—volunteer groups, work-study. In general, these groups tend to have a higher turnover. Love, Jacobs et al. suggested that if a peer group is able to maintain its existence over a long period of time and develop beliefs and values, it may in time develop into a subculture.

Love, Jacobs et al. (1993) described the culturally marginalized as those student groups that tended to contain individuals who felt a sense of disconnect with the institution. This differs from subcultures and peer groups who do feel connected even if their ideas and activities are not culturally accepted from an institutional perspective. At PWIs, African American students can fall into this category, and the sense of disconnect experienced can affect persistence and graduation (Tinto, 1987; Bean, 1987). This connection between the culturally marginalized and retention is discussed further below.

Student culture, as defined by Love, Jacobs et al. (1993) and Davis (1998), illustrates how students can be separated into groups or subcultures that interact differently with institutions dependent upon the perspective of the group(s). Student culture establishes the idea that institutions have individual identities and suggests that in attendance at each of these institutions are groups or subcultures that have specific needs.

Person and Christensen (1996) discussed culture from the perspective of the African American student. These researchers suggested African American students value interaction with other African American students, African American oriented programs, and "campus-sponsored" African American activities. Their research illustrated that these activities assisted in creating a culture unique to the African American student at

PWIs. As a result of observing African American student culture, Person and Christensen found that a major factor in why students did not achieve at high academic levels, persist, and graduate was the significant amount of time and effort that were put into establishing and/or maintaining an African American community.

These researchers suggested that merely having an office to deal with the needs of African American students is not enough. Steps to integrate the student into the institutional environment are required (Person and Christensen, 1996). Recent data from retention research at HBCUs provided an illustration of African American culture that differed from the culture at PWIs. Wagener and Nettles (1998) discussed African American student culture in a discussion of a five-year project funded by Pew Charitable Trusts to improve academic achievement and retention. Ten private HBCUs participated in the project, Hampton University, Xavier University, Spelman College, Dillard University, Fisk University, Howard University, Morehouse College, Johnson C. Smith University, Rust College, and Tougaloo College. In their discussion of the culture of HBCUs, Wagener and Nettles illustrated the involvement of administrators, faculty, and the students in the institution. Utilizing the term "a culture of community" to illustrate this phenomenon Wagener and Nettles discussed the involvement of the institution as a whole in the development, retention, and eventual graduation of students.

Hampton University's Vice President for student affairs for example, is responsible for being aware of the status of every student on campus. If a student is

having difficulty a discussion with the Vice President is often the result, with the following example discourse:

You're not showing up for your sessions. I take that as an indication you do not want to be here at Hampton University. [The student denies this is the case.] When you leave my office, call your faculty mentor and apologize. I expect you to show up for every session from now on. Is that clear? If I see you again in my office I'll take that as grounds for recommending your dismissal from the University (Wagener & Nettles, 1998, p. 20).

This type of discussion implies other activities that transpire at Hampton University and other HBCUs that illustrate the "culture of community" Wagener and Nettles speak about. Faculty involvement, enforced and reinforced individual responsibility, continuity, and communication between faculty and administration are all methods by which values are established and culture is developed and reinforced (Kuh & Hall, 1993; Wagener & Nettles, 1998).

This type of culture is substantially different from that illustrated by Person and Christensen (1996), where students expended significant amounts of time and effort to establish and maintain an African American culture. Conversely, Wagener and Nettles (1998) suggested that some HBCUs have an established culture that is designed and being redesigned to facilitate the success of students. This study took the results of previous researchers and uses it to assist in interpreting the results of a comparative analysis of graduation rates between and within HBCUs and PWIs.

Summary

In this chapter, I reviewed four distinct bodies of literature: (1) the research done on Historically Black Colleges and Universities; (2) the research on African American

students; (3) the research done on culture capital and institutional and student perspectives; and (4) the research done on retention, persistence, and graduation rates in higher education. These bodies of work help us to understand the role of African American students and the institutions they attend, both HBCUs and PWIs, from the perspective of the student. Past research explored the student as the unit of analysis; current perspectives utilize the institution as the unit of analysis. This study will utilize the institution as the unit of analysis to explore the graduation rates of African American students and in doing so expand the limits of current research.

A great deal of the variance in retention and persistence studies is still unexplained. This study focused exclusively on African American students in an effort to further understand the dynamics that lead to their persistence and graduation. In general the research covered here suggests that pre-college academic characteristics such as high school GPA, test scores (ACT or SAT) in addition to organizational characteristics such as institutional size, faculty – to – student ratio and amount of offered financial aid offered have a role in the success of students. Other factors such as family income, parents' educational history and living environment influence student graduation rates as well. As a secondary focus, the current study sought to shed light on HBCUs as unique institutions. Additionally, HBCUs are a source for PWI administrators to learn about their African American student population in order to provide them with better learning environments and opportunities.

CHAPTER 3

RESEARCH DESIGN AND METHOD

This chapter describes the research design and methodology utilized in this study. Included is a discussion of the National Graduation Rate Study (Kroc et al., 1997) which informed and guided this work. This discussion is followed by a description of the data collection process and the variables used in this work. Additionally, a description of the quantitative procedures used to explain and predict the graduation rates of institutions studied is discussed.

Background Information

In this study, data on PWIs were drawn from the National Graduate Rate Study (1997). Data on HBCUs were generated by the researcher, who developed connections with the institutions based on initial contacts by a research team consisting of three other student affairs researchers, faculty members, and administrators. As described in Chapter 1, many studies have investigated retention and persistence using students as the unit of analysis. Recent studies have used the institution as the units of analysis; one such study is The National Graduation Rate Study (Kroc et al., 1997).

Researchers at The Center for the Study of Higher Education at The University of Arizona contacted 72 public, land grant, AAU, Research I institutions. These universities were asked to participate in The National Graduation Rate Study. Institutions were asked to submit data on freshman cohorts and include the following information: high school grade point average, high school rank, admission test scores, residency information, four -

and five - year graduation status, gender, and ethnicity. Over 160,000 cases were retrieved from 53 institutions. Initial requests of institutions were made for the 1988 cohort; a follow-up request asked for data on 1990 students as well.

In a second phase of analysis, institutional factors were gathered on the same institutions. The institutional characteristics representing traditional measures of quality (i.e., number of faculty with Ph.D., faculty/student ratio, number of library volumes, percentage of budget spent on instruction) were gathered, and factor analysis was applied resulting in four factors: (1) cost factor – loaded heavily on tuition and cost of attendance, (2) budget factor – loaded heavily on ratios in budget categories, (3) size factor – loaded heavily on library volumes and student enrollment, and (4) quality factor – loaded heavily on selectivity and faculty credentials. Using a logistical multiple regression, Kroc, Woodard, Howard, and Hull (1995) were able to predict the graduation and persistence rates accurately for 70.2% of the students in the sample. Additionally, the study found, as did Astin (1993), that four factors were primarily responsible for the predictive ability of the model; high school grade point average (HSGPA), admission test scores, gender and ethnicity (Kroc et. al, 1995).

Utilizing Astin's (1993) retention equation for graduation rates as a model, researchers developed a logistic equation to predict the graduation rates of the cohorts based on the student's pre-college characteristics. Once rates were predicted for each of the institutions, actual graduation rates were compared with the predicted rates.

Observations were then made to determine whether institutions were graduating over or under the expected rate (of graduation).

Data Collection

Astin (1993), in his discussion of institutional retention rates, suggested multiple regression techniques based on retention measures coded as dichotomous variables. Additionally, Astin limited his analysis to four variables that are responsible for a significant portion of the variance – ethnicity, gender, test scores and high school GPA. In an extension of Astin's (1993) work, Kroc et al. (1995) looked specifically at the graduation rates of land grant, Research, AAU institutions. These researchers estimated four - and five—year graduation rates using both linear and logistic models. Residency, as an independent variable, was also added to the analysis. This work replicated and extended the work of Astin.

Utilizing a model similar to that of the aforementioned researchers, this study predicts graduation rates, by focusing on African American students at both HBCUs and PWIs. The uniqueness of this research is illustrated in its choice of subjects, African American students, and their choice of institution, HBCUs and PWIs.

Replicating the work done in The National Graduation Rate Study (1997) required first selecting and then contacting potential institutions for inclusion in the study.

Institutions were chosen based upon two criteria. First, the institution had to be recognized as a Historically Black College or University or have a student body that was majority African American (see Chapter 2 for a detailed description of HBCUs and

Predominantly White Colleges). Second, institutions had to be four-year institutions with enrollments of 2,000 or more students. Enrollment of 2,000 was chosen after a random sampling of institutions suggested these institutions were more apt to have the data in a useable format. Forty-six institutions met the requirements.

During the summer of 1999, these 46 institutions were contacted by letter and asked to participate in an extension of the National Graduation Rate Study (1997). Institutions were asked to provide data on their 1990 freshman cohort of students in the following areas: high school grade point average, admissions test scores, high school rank, residency, gender, ethnicity, four-year graduation status, and persistence as well as five-year graduation status and persistence. Repeated contacts were made during the summer of 1999 by telephone, e-mail, and fax. Seven institutions responded with data, three with data sufficient for use in the study. The three institutions that responded demonstrated the differences in HBCUs. Luapula College is located in the deep south and is a private institution with an exceptional reputation for educating African American students and bridging the gap to graduate schools. Togo College, located on the east coast, is a large, state comprehensive institution that recently went from being an open admissions institution to developing admissions requirements at the behest of its board of trustees. The third institution, Benin College, although an HBCU is no longer predominantly African American. Currently, less than 50% African American, Benin College is representative of the continuing trend of non-African Americans taking advantage of HBCU educational opportunities.

I attribute the low response rate to three factors. A number of institutions weere participating in, preparing for, or making changes due to reaccredidation requiremeents. The reaccredidation process did not allow institutional research offices the discretionary time and personnel to assist in gathering data. Second, data were not in a useable format or were not readily accessible. Third, and perhaps an underlying motivation for the previous two, information providers were suspicious about how the data would be utilized by researchers at a Predominantly White Institution. One administrator was forthright enough to state "and if you hadn't gone to Grambling we might not be heaving this conversation right now."

Data from the institutions were sent by File Transfer Protocol (FTP), e-mail, or traditional mail (on diskette). Once received, data were transferred into SPSS 9.0 ffor Windows and added to The National Graduation Rate Study (1997) database. Some data received from HBCUs were not complete. Four of the seven data sets were not useable and were discarded because they lacked critical information. Missing data included a mixture of the following: high school grade point average, high school rank, and admission test scores. Astin (1993) and Kroc et al. (1995) suggested that these varriables, with the inclusion of ethnicity, are the strongest predictors of graduation rates. Given that ethnicity was not a factor—all of the students were African American—the data sets lacking the critical information — high school grade point average, high school rank, and/or admissions — were excluded. It should be noted that much of the data from: the institutions was not included due to the open admissions policies of these institutions.

The policy in use at the time did not require the receipt of data such as high school grade point average or test scores from students upon enrollment.

Although requested, data regarding five-year graduation rates were not included by the institutions. This lack of data precluded a discussion of five-year graduation rates and persistence and to an extent, provides for further limits the study.

Once data from HBCUs were collected and added to the database, PWIs from within the same state or region were selected from the original National Graduation Rate Study (1997) database as comparison institutions. Each of the three institutions collected from the database are large, Research I, land grant institutions. Changes to the data included the elimination of all student cases where ethnicity/race was something other than African American. This resulted in files containing only African American students from all six of the institutions within the study.

For those individuals having ACT scores and no reported SAT scores, a conversion program was written utilizing Astin's (1993) concordance table.

ACT_English, ACT_Social Science, and ACT_Natural Science were added together and converted to a score for SAT_V. ACT_Math was then used to give a score for SAT_M.

SAT_V and SAT_M were then combined to give one score for admission test scores, SAT_C. The only students without test scores were those with no reported scores at all; these students accounted for 3.7% of the total. After discussion with my committee members is was agreed that this was a reasonable percentage of missing data.

Variables

The two dependent variables in this study were both dichotomous. The first, four-year graduation status, defined whether an individual had graduated within a four-year period. Those individuals still enrolled but not graduated were counted as not having graduated. The second variable, four-year graduation /persistence status, illustrated whether an individual had either graduated within a four-year period or was still enrolled after four years. In this case, those individuals still enrolled but not graduated after four years were counted with those who had graduated. With regard to assignment of variables, four-year graduation status was a dichotomous variable where "0" = not enrolled/enrolled not graduated and "1" = graduated. Four-year graduation status/persistence, however, was a dichotomous variable, where "0" = not enrolled and "1" = graduated/enrolled not graduated.

The independent variables used in this study were based on data gathered from the National Graduation Rate Study (1997) and data gathered specifically for the purpose of this study. Other factors that would have been beneficial in this study were not available and, therefore were not included in this study (i.e., family background, parents' education, family income, amount of financial aid, etc.).

The four independent variables for use in this study are as follows:

Statistical Treatment

Replicating the work of Kroc et al. (1995), multiple regression techniques were utilized to provide actual and predicted graduation rates for the entire data set, all HBCUs, all PWIs, state/region grouped institutions, and individual institutions as well. For the purposes of this research, two logistic equations were calculated. The first using four-year graduation status, the second four-year graduation status/persistence.

Controlling for student characteristics, four-year predicted graduation rates were calculated utilizing the following logistic regression equation:

logit(p) = .8399*HSGPA + .0021*SAT_C + .4532*RES - .7277*Gender - 5.1185

Four-year graduation/persistence rates where calculated using the following equation:

 $logit(p) = .7993*HSGPA + .0010*SAT_C - .0370*RES - .1168*Gender - 2.9160$ In both cases "p" can be calculated as follows:

$$p = e^{**}logit(p)/1 + e^{**}logit(p))$$

Kroc et al. (1995) found that the logistic regression equation predicted better at the extremes than the linear equation used by Astin (1993). Terenzini (1987) in his discussion of logistical equations and dichotomous variables, illustrated the appropriateness of logistic regressions' use in retention studies. He stated that logistical regression is a method by which many independent variables can be analyzed to surmise their influence on a dichotomous dependent variable. Additionally, the independent variables can be analyzed for amount of influence collectively or particular groups.

Analysis

Analysis of the data began with a descriptive statistical analysis of the students, institutions, and surrounding environments (i.e., the state). Initially, data were gathered on the states in which the institutions are located. Information on population demographics, economics, and education all were utilized to provide background information and facilitate a more complete analysis. Descriptive analysis of students was then employed to gather a picture of the institutions and the African American students enrolled.

Two general formats were utilized in discussing the data: total student patterns and student patterns by gender. Utilizing these formats, descriptions by state or region were utilized to gain a better understanding of the characteristics of students attending school in the differing locations. Additionally, incorporating high school grade point average along with the perspectives of gender and enrollment patterns allowed a more complete description of where particular types of students are, what they "look like," and a glimpse into their academic ability as well.

The second phase of analysis included comparisons of graduation rates, predicted and actual, at the individual institutional level in addition to grouping by state or region. Further analysis took into account gender differences in graduation and persistence rates in addition to the differing impacts of the other independent variables—HSGPA, Residency and SAT_C.

Methods of analysis used were congruent with those used in the literature. These differing modes of analysis allowed me to view the issues of African American students that were previously illustrated in the literature in addition to shedding light on others.

CHAPTER 4

RESULTS AND DATA

This chapter presents the findings of the analysis described in Chapter 3. The discussion of the data begins with descriptive data on the four states in which the institutions are located. State data were gathered from the U.S. Census Bureau (1990). Next is a presentation of institutional demographic and descriptive information. Student characteristics are the next set of data presented; this information is followed by the actual and predicted graduation rate data for individual institutions and multiple groupings of institutions. To protect anonymity, the states and institutions are identified using pseudo-names. The names chosen are taken from names of African towns, counties, states, or countries. The states are as follows: Luapula, Togo, Benin, and Chad. The HBCUs within these states are labeled as Luapula College, Togo College, and Benin College, and the PWIs are labeled as Luapula University, Togo University, and Chad University. The data discussed in this chapter are presented in Tables 4.0-4.18 as well as Figures 4.0-4.5, and the reader will need to refer to these tables while reading through the summary information for each state. Individual institutional profiles including descriptive and graduation rate data are located in the appendices

Descriptive Characteristics

State Characteristics

The institutions in this study are located in four states with total populations ranging from 6.5 million (Chad) to 3.9 million (Benin). The percent of females in each

state is constant throughout all four states. The population of each state is approximately 52% female. The ethnic demographics provide much more of a contrast, with a low of 7.1% African Americans in Benin and a high of 31% in Luapula. A more detailed discussion of the states follows. The demographic information for each state is located in table form following the written discussion of results. Additional tables, containing all states for purposes of comparison, are located in the summary section and in the appendices.

Luapula. Luapula has the highest percentage of African Americans at 31%; White persons represent 67% of the population. High school diplomas are earned by an average of 68.3% of the population. A smaller proportion of the total African American population in the state, 53.1%, has earned a high school diploma (see Table 4.0). Of the total number of African Americans, 11% are of college age – fairly evenly split with 5.6% males and 5.4% females. Baccalaureate degrees are held by 7.5% of the African Americans over 25 years of age, and 23.9% of White persons in the same age range are similarly educated. Overall, 16.1% of the population of Luapula over 25 years of age earned a Bachelor degree, with large differences between African Americans and Whites (see Table 4.1).

Of the White population, 13.3% live below the poverty level, in comparison to 44% of the African American population. With a state average of 23.6% of the populace living below the poverty level, Luapula is well above the national average of 13.5%.

Luapula also has the highest percent of individuals living below poverty level in the sample (see Table 4.2).

Table 4.0

Percent of High School Graduates

	BLACK	WHITE	STATE AVG.	NAT. AVG.
LUAPULA	53.1	74.2	68.3	75.2
TOGO	60.3	78.3	75.2	75.2
BENIN	61.7	64.6	64.6	75.2
CHAD	58.6	74.9	70.9	75.2

Includes only individuals 25+ yrs. old

U.S. Census Bureau, 1990

Benin. Of the states in the sample, Benin has the largest disparity between percentages of African American and White persons at 7.1% and 92%, respectively. The African American college-age population represents 12.4% of the total number of African American individuals, with 6.6% being male – the highest in the sample – and 5.8% female. A high school diploma has been earned by 64.6% of the population of Benin. Of the total African Americans within the state, 61.7 p% have earned a high school diploma (see Table 4.0).

Of the total population, 6.3% of African Americans are enrolled in college, and a somewhat lower percentage of White persons (5.6%) are similarly enrolled. The statewide percent of individuals over 25 years old possessing a baccalaureate degree is 20.1% -- 13.7% for African Americans and 20.2% for White persons (see Table 4.1).

Benin has the lowest percentage of African Americans (21.1%) living below the poverty line; 7.2% of White persons live below the poverty line in Benin. With a state average of 15.6%, Benin is approximately two percentage points over the national

average. Benin is the only state in the sample that is above the national average in personal income and average household income (see Table 4.2).

Table 4.1

Percent of Four-Year College Graduates

	BLACK	WHITE	STATE AVG.	NAT. AVG
LUAPULA	9.1	18.7	16.1	20.3
TOGO	11.1	27.0	24.5	20.3
BENIN	7.7	13.7	13.6	20.3
CHAD	11.0	21.8	19.3	20.3

Includes only individuals 25+ yrs. old

U.S. Census Bureau, 1990

Togo. Togo has the second lowest percentage of African Americans (19%) in the sample. College-age African Americans represent 12.5% of the total African American population within the state; this is the highest in the sample. The state's percentage of individuals enrolled in college is 7.1%, with 6.2% of the total African Americans and 7.2% of White persons enrolled in college. The percentage of African Americans and White persons over 25 years old receiving a four-year degree are 11.1% and 27.0%, respectively (see Table 4.1).

Comparatively speaking, Togo appears to be struggling economically. Togo has the lowest percentage of individuals (17.3%) below the poverty line. The African American and White percentages of individuals below the poverty line are the second highest in the sample at 33.1% and 17.4%, respectively (see Table 4.2).

Correspondingly, Togo also has the second lowest levels of personal income at \$16,236 and household income at \$30,904.

Chad. The disparity between the percentages of African American (27%) and White individuals (71%) within the state is the third highest in the sample. The number of college-age African Americans living in Chad represent a similar proportion (12.2%) of the population as the other states in the sample. Chad is also similar in proportion to percent of total population enrolled in college (5.5%), percent of African Americans enrolled (5.5%), and White persons enrolled in college (5.8%). The percentage of African Americans over 25 with a Bachelors degree, however, is the second highest in the sample at 11.0% (Togo is 11.1%). In comparison, however, 21.8% of White individuals possess a Bachelors degree in Chad. The statewide percentage of individuals over 25 with a four-year degree is 19.3% (see Table 4.1).

Economically, 29.1% of the African Americans in Chad are living below poverty level. White persons are faring better with only 8.6% below the poverty level. Regarding personal annual income, Chad is second highest in this sample at \$18,712, yet it is still approximately \$2,000 below the national average. The household income in Chad is \$38,665, one of two states with an average above the national average of \$37,343 (see Table 4.2).

Summary. The state demographics assist in providing a picture of the institutions by giving an idea of the population the institutions have to draw upon for potential students and the financial circumstances of these students. All of the four states are above the national average in *Percent Below the Poverty Line* – they have more people living below the poverty line than the national average (see Table 4.2). African

Americans are well above their White counterparts in percent of individuals living below the poverty line, ranging from nearly 8% points to over 30 % points higher than the national average.

Table 4.2

Percent Below the Poverty Line

	% OF	% OF	% of TOTAL	NAT. AVG.	
	BLACKS	WHITES	POP.		
LUAPULA	44.0%	13.3%	23.6%	13.5%	
TOGO	33.1%	17.4%	17.3%	13.5%	
BENIN	21.1%	7.2%	15.6%	13.5%	
CHAD	29.1%	8.6%	14.2%	13.5%	

U.S. Census Bureau, 1990.

Educational characteristics of the states in the study provide a background from which to begin to understand student graduation and persistence rates. For African Americans, three of the states in the sample, Luapula, Benin, and Chad, are below the national average in percent of individuals with a high school diploma or equivalent. These are also the states with the highest number of African American residents (see Table 4.5).

Table 4.3
State Populations

STATE	TOT. POP.	MALE	FEMALE	BLACK	WHITE
LUAPULA	4.3 million	48%	52%	31%	67%
TOGO	6.2 million	49%	51%	19%	79%
BENIN	3.7 million	48%	52%	7.1%	92%
CHAD	6.5 million	48%	52%	27%	71%

Populations rounded to nearest hundred thousand.

U.S. Census Bureau, 1990.

Even more telling is Chad, with the lowest percent of African American residents possessing a high school diploma (53.1%) and the largest African American population. Benin, on the other hand, has the highest percent of African Americans with a high school diploma (61.7%) and the smallest African American population, suggesting a connection between numbers of African Americans and percent of African Americans finishing high school. In other words, the data suggest a connection between a larger African American population and low levels of educational attainment.

An overall review of the state demographic data reveals the following salient points.

- 1. Overall, there is a 9% difference between African Americans and Whites who have completed high school or equivalent.
- 2. There is a 12% difference between African Americans and Whites who have earned a four-year degree.

- 3. All states in the sample are above the national average in percent of African Americans living in poverty.
- 4. Substantially higher percentages of African Americans live in poverty than White individuals.

Institutional Characteristics

Institutional characteristics described are divided into enrollment and economic data. Enrollment data consist of information on African American students, the gender of the students, percentage in the state, and ethnic make-up of the student body. Each of these data sets includes only freshman African Americans in the sample and is taken from data provided by the institutions in the study. The information on the ethnic make-up of the institutions is taken from data reported by the institution to The College Board 1992
Annual Edition
These data, although somewhat dated, provide an idea of the institutional demographics at the time the students in this study were in attendance.

Additionally, data on current ethnic demographics of the institution are provided to give a comparison; these data were taken from Petersons 'Guide to Four Year Colleges 2000.

The PWIs involved are the flagship institutions in three of the four states examined.

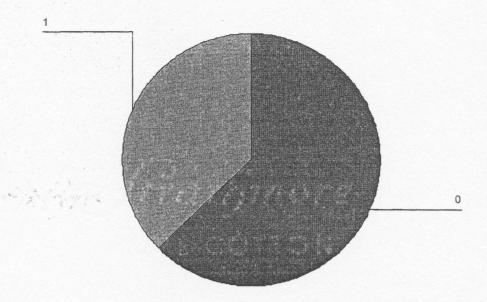
Togo University is the only institution that is not the flagship institution.

The second data set on institutional characteristics provides economic and financial information including tuition and fees, on-campus fees, miscellaneous fees, and percent of students (freshmen) on financial aid. These data were taken from the National

Center for Educational Statistics (1999) web sites for each of the institutions in the sample.

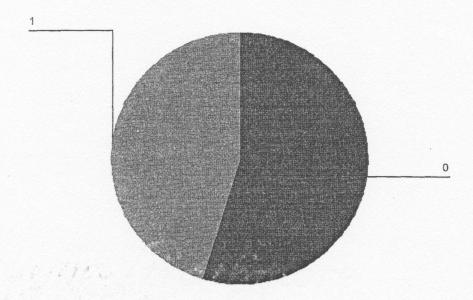
Figure 4.0Gender of Students in Study

Legend: 0=Female, 1=Male



The total number of African American students in the study is 3,405. Of this number, 1,267 (37%) were male, and 2,138 (63%) were female (see Figure 4.0). Six of 10 (66%) students in the sample were state residents (see Figures 4.0 and 4.1). The total number of HBCU students is 2,069 or 70.4% of the sample.

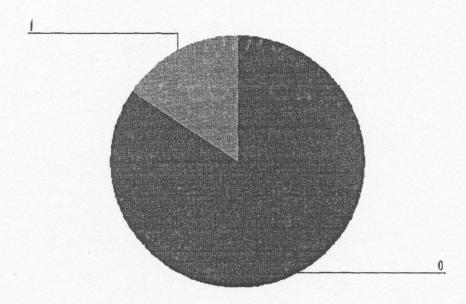
Figure 4.1
In-State Residency: HBCUs
Legend: 0=in-state, 1=out-of-state



Females also outnumber males at HBCUs; 63% of the total population and 55% of these students were state residents. PWIs represent 39% of the total sample with 1,336 total students. Similar to the HBCUs, female students outnumber male students at PWIs. With 37% of the students being male and 63% female, the gender distribution is similar at both HBCUs and PWIs. There is, however, a very distinct difference in the comparison of the in-state students. In PWIs, 85% of the students are state residents, compared to 55% for HBCUs (see Figures 4.1 and 4.2). An individualized profile of the institutions is available in Appendix A. Aggregate data are presented in table form in the summary section.

HBCUs and PWIs Summary. HBCUs have a total enrollment of 2,069 African American students in the 1990 cohort, PWI African American students number 1,336. Females clearly are the majority at both sets of institutions – 63% at HBCUs and 63% at PWIs. Men number a little over one-third of the students, 37% at both sets of institutions. Just over half of the students in the sample claim in-state residency at HBCUs; a larger number (85%) are in-state at PWIs.

Figure 4.2
In-State Residency: PWIs
Legend: 0=in-state, 1=out-of-state



In-state tuition and fees are higher at HBCUs for the institutions in this sample; out-of-state fees, however, are the highest at PWIs. Room and board fees are comparable with less than a \$200 difference. There is a 30% difference in the percentage of individuals

receiving financial aid between HBCUs and PWIs. HBCU sturdents receive financial aid at a rate of 86%, but only 56% students attending PWIs receive aid.

Table 4.4

African American Student Enrollment

	TOTAL MALES	TOTAL MALES	TOTAL FEMALES	TOTAL FEMALES	IN-STATE	% MINORITY	% A.A.	TOTAL STUD.
LUAPULA COLLEGE	176	27%	474	73%	54.5	98% (98%)	90% (94%)	650
TOGO COLLEGE	455	40%	673	60%	54.4	99% (99%)	89% (90%)	1,128
BENIN COLLEGE	137	47%	154	53%	56.0	70% (66%)	42% (64%)	291
ALL HBCUs	768	37%	1301	63%	54.7			2,069
LUAPULA UNIVERSITY	173	57%	130	43%	91.7	15% (18%)	10% (9%)	604
TOGO UNIVERSITY	160	45%	195	55%	63.4	13% (15%)	5% (4%)	355
CHAD UNIVERSITY	98	26%	279	74%	92.8	10% (13%)	3.9% (7%)	377
ALL PWIs	499	37%	8 7 7	63%	84.5			1336
ALL INSTIT.	1267	37%	2138	63%	66.4			3405

Information in parenthesis represents year 2000 data

Data submitted by institutions, 1999

Overall, a few broad statements can be made about the institutions in this sample.

- 1. Financial aid is utilized at a higher rate at HBCUs.
- 2. Tuition is generally lower at HBCUs.
- 3. The HBCUs have a much larger out-of-state African American population.
- 4. The proportion of males to females is the same at both sets · of institutions.

Student Characteristics

Two basic sets of student characteristic data are discussed next, the mean high school grade point average (HSGPA) and the mean SAT scores. Data were gathered

from each of the institutions on these characteristics and in some cases converted from high school rank (for HSGPA) or ACT scores (for SAT) (see Chapter 3 for a more indepth discussion of data gathering and conversions). In some cases, student information was not available, that is, neither high school rank nor high school GPA were available or neither ACT nor SAT scores, were reported. In these situations, the cases were dropped, but this reflects less than 5% of the total cases in the study (see Chapter 3).

HBCUs and PWIs Summary

Overall, HBCUs have a lower HSGPA (2.45) than do the PWIs (3.02). The same is true for the SAT scores with HBCUs averaging 722 and PWIs 889 (see Table 4.19).

Table 4.5
Student Characteristics

	MEAN GPA	SAT	IN-STATE	%	TOTAL
				FEMALE	STUD.
LUAPULA COLLEGE	2.70	882	54.5	73	650
TOGO COLLEGE	2.30	619	54.4	60	1,128
BENIN COLLEGE	2.47	757	56.0	53	291
ALL HBCUs	2.45	722	54.7	63	2,069
LUAPULA UNIVERSITY	2.85	826	91.7	43	604
TOGO UNIVERSITY	3.19	953	63.4	55	355
CHAD UNIVERSITY	3.15	917	92.8	74	377
ALL PWIs	3.02	889	84.5	63	1,336
ALL INSTIT.	2.67	784	66.4	63	3,405

Data submitted by institutions, 1999.

The average HSGPAs for female students at HBCUs are 2.57 and 3.10 for PWI female students. The pattern remains the same for the female SAT scores; HBCUs are 730 and PWIs are 879 (see Table 4.6).

Table 4.6

Female Student Characteristics

	MEAN	MEAN	% IN-	TOTAL
	GPA	SAT	STATE	STUD.
LUAPULA	2.79	887	54	474
COLLEGE				
TOGO COLLEGE	2.40	615	51	673
BENIN COLLEGE	2.59	751	53	154
ALL HBCUS	2.57	730	52	1301
LUAPULA	2.97	818	95	398
UNIVERSITY				
TOGO	3.29	951	64	160
UNIVERSITY				
CHAD	3.19	912	94	279
UNIVERSITY				
ALL PWIS	3.10	879	89	837
ALL INSTIT.	2.77	786	67	2138

Data submitted by institutions.

The patterns for the male students are similar, with the GPA for men at HBCUs at 2.25 and SAT scores averaging 707. At PWIs, the scores are higher, with an average GPA of 2.89 and SAT scores of 906 (see Table 4.7).

Table 4.7

Male Student Characteristics

	MEAN	MEAN	% IN-	TOTAL
	GPA	SAT	STATE	STUD.
LUAPULA	2.43	870	55	176
COLLEGE				_
TOGO COLLEGE	2.15	628	59	455
BENIN COLLEGE	2.33	762	60	137
ALL HBCUs	2.25	707	58	768
LUAPULA	2.62	841	86	206
UNIVERSITY		l]	
TOGO	3.10	955	63	195
UNIVERSITY				_
CHAD	3.04	930	90	98
UNIVERSITY		<u> </u>		
ALL PWIs	2.89	906	78	499
ALL INSTIT.	2.50	782	66	1267

Data submitted by institutions, 1999.

Although there are clear differences between the HBCUs and PWIs, the gender differences are not only between types of institutions but across institutions as well. The women in this sample tend to have higher GPAs, and men tend to score higher on the SAT exams at PWIs.

Graduation Rates

The discussion of graduation rates in this section covers both the actual and predicted rates using the logistic regression equation described in Chapter 3.

Additionally, a discussion of the four-year graduation rates plus persistence is included. This section concludes with a discussion of gender differences at HBCUs and PWIs to provide a clearer sense of the male/female differences. Individual institutional profiles regarding graduation rates are available in Appendix C.

Institutional Data

HBCUs. The female students at Luapula College have a four-year actual graduation rate of 45%, nearly 10 points higher than the predicted graduation rate for the entire student population at the institution. The Luapula College men, the highest in the sample at 40%, are 12 points above the predicted graduation rate (28%). Togo College has an actual graduation rate of 12%. How the graduation rates of these institutions can be skewed by gender is illustrated by the actual graduation rates of the females at Togo College (18% - nearly equal the predicted) and the rates of the males (4%-13 points below the predicted). Benin College women have an actual graduation rate of 29%, nearly five points above the predicted rate. The men at Benin College have a four-year

actual graduation rate of 18%, five points below the predicted rate (see Table 4.8).

Table 4.8

All Institutions
Graduation Rate Data

	4YR ACTUAL	4YR PRED.	4YR+PERS	4YR+PERS PRED.	IN-STATE RES	TOTAL STUD.
LUAPULA COLLEGE	43%	29%	56%	50%	54.5	650
TOGO COLLEGE	12%	16%	39%	38%	54.4	1128
BENIN COLLEGE	24%	20%	27%	43%	56.0	291
ALL HBCUS	24%	21%	42%	43%	54.7	2069
LUAPULA UNIVERSITY	10%	26%	48%	53%	91.7	604
TOGO UNIVERSITY	27%	34%	57%	60%	63.4	355
CHAD UNIVERSITY	31%	32%	61%	60%	92.8	377
ALL PWIS	21%	30%	54%	57%	84.5	1336
ALL INSTIT.	23%	24%	47%	48%	66.4	3405

Aggregate data are weighted by number of students per institution.

Data submitted by institutions, 1999.

In each institution, the females in the sample are masking the graduation rates of the men. By separating the graduation rates by gender, it becomes apparent that the percentages are as "high" as they are due to the influence of higher female graduation rates. Regardless of gender, however, when only observing the females in the sample, two of the three HBCUs— Luapula College and Benin College — over-perform with regard to the four-year graduation rate versus the predicted rate. Observing the four-year graduation rates plus persistence, each of the HBCUs over-performs slightly for the females, the exception being Benin College (34% versus 46%) (see Tables 4.9 and 4.10).

PWIs. Women at Luapula University have a four-year actual graduation rate of 13%. Men at the same institution have a four-year graduation rate of 6%, 20 points under

the predicted graduation rate. Togo University females have a four-year graduation rate of 31%. The males at Togo University have a four-year graduation rate of 24%, 15 percentage points lower than the predicted rate. Females at Chad University have a graduation rate of 34.4%, once again nearly equal to the predicted rate. Men at Chad University have a four-year graduation rate of 25%, nine points below the predicted rate (see Tables 4.9 and 4.10).

Observing the four-year plus persistence data for females, each of the PWIs is above 50% and within seven points of the predicted rate of graduation for the females. Males at the PWIs have an actual graduation rate similar to the females, except at Luapula University. The actual four-year plus persistence rate for the men at Luapula University is seven points below the female rate (see Tables 4.9 and 4.10).

Table 4.9

All Institutions

Female Graduation Data

	4-YR	4YR	4-YR+PERS	4-YR+PERS	% IN-	TOTAL
	ACTUAL	PRED		PRED	STATE	STUD.
LUAPULA	45%	33%	57%	53%	54	474
COLLEGE						j
TOGO COLLEGE	18%	19%	43%	41%	51	673
BENIN COLLEGE	29%	25%	34%	46%	53	154
ALL HBCUs	29%	25%	47%	46%	52	1,301
LUAPULA	13%	30%	51%	56%	95	398
UNIVERSITY						_
TOGO	31%	42%	57%	64%	64	160
UNIVERSITY						
CHAD	34%	35%	61%	62%	94	279
UNIVERSITY						
ALL PWIs	24%	34%	56%	60%	89	837
ALL INSTIT.	27%	28%	50%	51%	67	2,138

Aggregate data are weighted by number of students per institution. Data submitted by institutions, 1999.

Table 4.10

All Institutions Male Graduation Data

i	4-YR	4-YR	4-	4-	% IN-	TOTAL
	ACTUAL	PRED	YR+PERS	YR+PERS	STATE	STUD.
	1		1	PRED		
LUAPULA	40%	28%	54%	44%	55	176
COLLEGE	!					
TOGO COLLEGE	4%	17%	34%	34%	59	455
BENIN COLLEGE	18%	23%	19%	39%	60	137
ALL HBCUs	14%	21%	36%	37%	58	768
LUAPULA	6%	27%	43%	46%	86	206
UNIVERSITY						
TOGO	24%	39%	57%	57%	63	195
UNIVERSITY					1	
CHAD	25%	34%	61%	56%	90	98
UNIVERSITY	1					
ALL PWIs	17%	33%	52%	53%	78	499
ALL INSTIT.	15%	26%	42%	43%	66	1267

Aggregate data are weighted by number of students per institution. Data submitted by institutions, 1999.

Differences Within Sectors are as Important as Differences Between Them. As mentioned above, significant differences occur in relation to the institutions in this study. Some the most interesting differences occur between like institutions (HBCUs and PWIs). Within the HBCUs, three institutions represent an interesting cross-section of the United States. Regionally, one institution is located in the Deep South; the others are located in the southeastern portion of the United States. Additionally, differences exist in the demographic make-up of the institutions. One of the institutions, Benin College, currently does not have a majority of African American population. The other two institutions, Luapula and Togo College, still maintain a population that is majority African American (90% and 89%, respectively).

The PWIs have a variety of differences among themselves as well. As with the HBCUs, one of the PWI schools, Luapula University is located in the Deep South; the

other schools are located in the southeastern portion of the United States. Chad University has by far the highest percent of African American women (74%), the next closest being Togo University at 55%.

Summary

Institutional Characteristics

Observing institutional differences and similarities across types of institutions, it is clear that higher GPAs and SAT scores do not automatically equal higher graduation rates. There is, however, a positive and significant correlation between pre-college characteristics and graduation rates (see Table 4.11). It is also important to note the connection between gender and 4yr graduation and 4yr graduation plus persistence and the difference between the PWIs and HBCUs in this area. Consistent with the literature, these data show generally that the connection between graduation, persistence, and being female is greater than the connection with being male (Fleming & Morning, 1998). When observing the difference between types of institutions, however, a much stronger connection between graduation and persistence and being female at HBCUs is illustrated (see Tables 4.11 and 4.12).

An alternate rationale for this connection could simply be the significant difference in HSGPA of females and males in the sample. Although attempts to control for the influence of HSGPA are utilized in the equation (see Chapter 3), it is not possible to eliminate completely the influence of one variable on another (Astin, 1993). In this sample, the average difference between male and female HSGPAs for PWIs is .23 and .29

for the HBCUs. This difference is due to the high correlation between HSGPA and graduation and persistence rates which could be influencing other factors as well.

Although correlations between pre-college characteristics – SAT scores and HSGPA – and actual persistence and graduation rates are significant at both HBCUs and PWIs, this does not explain completely why HBCUs tend to do as well or better in their capacity to graduate and persist students than PWIs.

PWI Correlations

Table 4.11

	4 YR GRAD	4YR GRAD+PERS	SAT_C	GENDER	IN-STATE	HSGPA
4YR GRAD	1.00	.472**	.182*	035	064*	.261**
4YR GRAD+ PERS	.472**	1.00	.197**	082**	073**	.234**
SAT_C	.182**	.197**	1.00	.083**	.061*	.462**
GENDER	035	082**	.083**	1.00	.148**	181**
IN-STATE	064*	073**	.061*	.148**	1.00	021
HSGPA	.261**	.234**	.462**	181**	021	1.00

^{**}Correlation is significant at the 0.01 level (2 tailed).

^{*}Correlation is significant at the 0.05 level (2-tailed).

Table 4.12

HBCU Correlations

	4 -YR GRAD	4-YR GRAD+PERS	SAT_C	GENDER	IN-STATE	HSGPA
4YR GRAD	1.00	.645**	.170**	106**	.010	.250**
4YR GRAD+ PERS	.645**	1.00	.266**	168**	.082**	.351**
SAT_C	.170**	.266**	1.00	049*	.006	.381**
GENDER	106**	168**	049*	1.00	057**	285**
IN-STATE	.010	.082**	.006	057**	1.00	.107**
HSGPA	.250**	.351**	.381**	285**	.107**	1.00

^{**}Correlation is significant at the 0.01 level (2 tailed).

HGPAs are nearly half a point lower at HBCUs, and SAT scores are over 160 points lower at HBCUs when compared with PWIs. HBCUs, however, slightly over-perform with regard to their four-year graduation rates and perform as expected in relation to their graduation plus persistence rates. PWIs are significantly under-performing with regard to their four-year graduation rates and slightly under-performing in relation to their four-year graduation plus persistence rates; this is with the supposed advantage of "better-prepared" students.

Further evaluation of the regression analysis results reveals that the model does a poor job in predicting the success in graduation or persistence of the students in the sample, predicting correctly for students graduating in four years a mere 13% of the time. The model is much more adept at identifying those students who will not persist and/or

^{*}Correlation is significant at the 0.05 level (2-tailed).

graduate. This would suggest that this model is not extraordinarily useful in predicting the success of these students and that there are other factors than the traditional precollege characteristics that affect the graduation and persistence of these students, factors that are not taken into account by this model.

Student Characteristics

Differences along gender lines are clear in this study. Across the sample, HBCUs generally have lower test scores and HGPAs, but a higher difference between male and female HSGPAs. These initial patterns of pre-college characteristics, HBCUs having lower test scores and GPAs, remain when men and women are explored separately. Additional significant differences are in the graduation rates of men and women. The graduation rates of men in the sample are significantly lower than female rates. As a result, an evaluation of the graduation rates is not complete without a gender-specific breakdown of the graduation rate data.

Males

HSGPAs for men are approximately one-half point lower at HBCUs than the female HSGPAs. The male SAT scores at HBCUs are significantly lower than their male counterparts at PWIs. SAT scores are nearly 200 points lower for men at HBCUs versus PWIs. When attempting to control for pre-college characteristics, HBCUs are performing below what would be expected in terms of four-year graduation rates – seven points lower – and are doing as expected in terms of four-year plus persistence rates. Men at PWIs are under-performing in relation to four-year graduation rates as well – 16 points

lower – and are doing as expected with regard to four-year graduation plus persistence rates.

Females

The HSGPAs for females are nearly one-half a point lower at HBCUs, and SAT scores are 150 points lower at HBCUs as well. Females at HBCUs, however, slightly over-perform with regard to four-year graduation rates and perform at capacity in relation to four-year graduation plus persistence rates. The women at PWIs significantly underperform with regard to four-year graduation rates and slightly under-perform in relation to four-year graduation plus persistence rates. These results indicate that although both men and women appear to have difficulty finishing in four years, the women are doing significantly better (7%) than the men (see Tables 4.9 and 4.10).

Gender Summary

HBCU females have an average four-year graduation rate of 29% – four points above the actual rate – and a four-year plus persistence rate of 47%, which is consistent with what would be predicted. Males at HBCUs have a four-year graduation rate of 14% – seven points below the expected – and a four-year plus persistence rate of 36% – nearly equal the predicted rate of 37%, yet 10 points lower than the female rate. The females at HBCUs seem to be more successful at finishing in four years; the males and females, however, are close to the expected rate in the four-year plus persistence category.

Overall, at the PWIs, females have an average four-year graduation rate of 24% – 10 points below the predicted rate – and a four-year graduation plus persistence rate of

56% – four points below the predicted rate. Men at the PWIs have a four-year graduation rate of 17% – 16 points below the expected – and a four-year plus persistence rate of 52% it – nearly equal the expected of 53%. In summary, for men and women in this sample, four-year graduation rates plus persistence rates for PWIs are closer to the predicted than the four-year graduation rates. These results suggest that the "finish in four" stereotype may not be attributable to the African American students in this sample.

The purpose of this study is not to identify the factors that are not taken into account; however, a review of the literature suggests some of the contributing factors that are not specifically addressed in this investigation. One of these factors may be economics. Although not considered as a variable for use in this model, data regarding the economic situations of the states within the study and the institutions themselves are utilized in the discussion in Chapter 5. These data, in addition to other historical and cultural gathered data provide a more thorough understanding of the issues affecting these students and their persistence.

CHAPTER 5

CONCLUSIONS

This chapter describes the conclusions drawn from the data and results presented in Chapter 4 and implications for practice and further research. The data are analyzed using retention and culture theory and student characteristics and institutional type as interpretable frameworks. The chapter is divided into three parts: (1) the research questions that shaped this study and the corresponding responses based on the results and data in Chapter 4, (2) gender-specific interpretations of results and data, (3) implications for practice and further research, and (4) insights and perspectives gained from this research and their usefulness to the writer as a future practitioner in academic and student affairs.

Researchers using the African American student characteristic framework have suggested a variety of different perspectives that will assist in the discussion and analysis in this chapter. Two themes from the framework are of use. The first suggests that African American students attending PWIs tend to have higher test scores and GPAs than their HBCU counterparts (Fleming, 1984; Fleming & Morning, 1998; Pascarella & Terenzini, 1991). This is of importance because early research stated a significant predictor of student success is academic preparedness as measured by high school GPA and test scores (Astin, 1975; Bean, 1980; Tinto, 1975). Merging these two concepts suggests African American students at PWIs would tend to have higher graduation rates.

The second theme is a more recent perspective which explores the connection between pre-college characteristics in general, test scores in specific, and African American student success – defined as persistence and graduation (Braxton et al., 1997; Fleming & Morning, 1998; Somers et al., 2000). Recent retention and persistence research has illustrated a disconnect between test scores and African American student success (Fleming & Morning, 1998; Somers et al., 2000). This theme suggests that although test scores correlate with success, they may not be extraordinarily predictive of student success, further suggesting that other factors are at work as determinant factors in African American student graduation and persistence.

These two somewhat conflicting parts of the African American student perspective will be useful in analyzing data reported in Chapter 4.

Research Question 1

What differences, from a demographic perspective if any, exist between African American students attending Predominantly White Institutions and Historically Black Colleges and Universities?

Demographic differences between African American students attending PWIs and HBCUs, given the data, exist primarily in three areas; in-state residency, SAT scores, and GPAs.

Institutional and Student Characteristics

This section is divided into two parts. The first section discusses in-state residence and offers some potential explanations for the results from Chapter 4.

Specifically, the first section explores why HBCUs in the sample appear to be more successful attracting out-of-state students. The second section discusses SAT scores and GPAs providing some explanation for higher graduation rates for women in the sample and for PWIs versus HBCUs. The reader should keep in mind the data gathered regarding the states in the study – economic and educational. These data will assist in providing a context for understanding the student characteristics, and they will be referred to periodically.

In-State Residence

Over half of the students at HBCUs (55%) in the study are in-state residents compared to 85% at PWIs. There are several possible explanations for this difference. First is difference in cost among the institutions; tuition prices combined with potentially limited resources may help explain why HBCUs seem to be more successful attracting out-of-state African American students. Jackson and Swan (1991), in their discussion of African American students at PWIs, stated that African Americans attending PWIs are more likely to rely on family for financial support; African American students attending HBCUs tend to rely on institutional support. This institutional support, described by Jackson and Swan, includes traditionally need-based aid such as loans, Pell Grants, and veterans benefits. The use of need-based aid suggests that students attending HBCUs may not have family financial resources equal to the students attending PWIs.

This reliance on institutional support versus family support suggests that students are attending institutions they can afford and perhaps for some students is perceived as a

better value based on the proportion of institutional aid offered to the total cost of attendance.

A further examination of institutional tuition seems to support this observation. Of the three PWIs, only one, Luapula University, has a lower out-of-state tuition than its state counterpart, Luapula College. In this case, Luapula College is a private institution with a set tuition (no out-of-state fee), and Luapula University, like the rest of the PWIs, is a Research I institution, charging higher out-of-state fees. The remaining PWIs in the sample have substantially higher in-state and out-of-state fees compared to their HBCU counterparts (see Table 5.0). A sampling of land grant institutions (HBCUs and PWIs) further supports this hypothesis; PWIs charge higher tuition than HBCUs, and HBCUs enroll a higher percentage of students on financial aid (see Table 5.1).

Table 5.0
TUITION AND FEES

	TUITION & FEES	TUITION & FEES	ROOM &	%	IN-STATE
	IN-STATE	OUT-OF-STATE	BOARD	FINANCIAL	
				AID	
LUAPULA COLLEGE	\$8900	\$8,900	\$5,100	90%	54.5
TOGO COLLEGE	3,086	8,630	5,096	85%	54.4
BENIN COLLEGE	2,020	6,060	3,446	82%	56.0
ALL HBCUs	4,669	7,863	4,547	85.6%	54.7
LUAPULA UNIVERSITY	2,881	7,081	4,130	50%	91.7
TOGO UNIVERSITY	3,620	11,844	3,865	35%	63.4
CHAD UNIVERSITY	3,034	10,276	4,902	69%	92.8
ALL PWIs	3,178	9,734	4,737	50.1%	84.5
ALL INSTIT.	3,923	8,798	4,642	78.6%	66.4

1999 academic year information. Petersons' College Boards, 1999.

Although the data do not show what percentage of the actual fees are covered by the financial aid received, the factors presented here support the concept of some African American students not being able to afford to attend the in-state PWI and, therefore, making a choice that is economically sound for them, that is, to attend an out - of - state HBCU.

Table 5.1
Sample of Matched In-State Land Grant HBCUs and PWIs

Institution	In-State	Out-of-State	% Fresh on Aid
ALCORN STATE	4975	6157	92%
MISSISSIPPI STATE	5245	8361	42%
UNIV. OF ARK, PINE BLUFF	4595	6333	86%
UNIV. OF ARK, LITTLE ROCK	2870	5210	60%
ALABAMA A&M UNIV.	4590	5578	60%
UNIV. OF ALABAMA	7148	9958	28%
PRAIRIE VIEW A&M	5814	9054	85%
UNIV. OF TEXAS, AUSTIN	6300	9420	27%
SOUTHERN UNIV.	5127	6649	90%
LOUISIANA STATE	6532	9732	50%
KENTUCKY STATE	5210	7810	82%
UNIV OF KENTUCKY	5879	9119	48%

Institutions in **bold** are HBCUs Petersons' College Board, 1999

A second possible explanation for the difference between in-state/out-of-state enrollment patterns may be a result of "good institutional fit". Tinto (1975, 1987), in his model of institutional departure, suggested that separation between the student and the family is a positive event. The result of this separation is a connection or integration between the student and the institution. In other words, successful college students are able to disconnect from family and friends and develop a relationship or become integrated with the academic and social settings of the institution. Brown (1963), in his

discussion of African American culture, suggested that African American students cannot truly be understood unless the culture of the student is understood and taken into account. This concept was supported by Tierney (1987) who criticized, Tinto's (1975, 1987) separation/integration perspective. Tierney (1987) claimed that minorities have a different utility for family and friends, based on their culture, and that a disconnect from them does not necessarily facilitate students' success. In fact, the reverse is often the case. How, then, does this fit with African American students at HBCUs being drawn from out of state in such large percentages? One view, based on the importance of family support, would suggest that African Americans would be more likely to stay close to home to continue their education. I argue that it is not the actual home or family that is required or helpful in the persistence of African American students but the feel or sense of family that facilitates the success of these students. HBCUs provide this sense of family or comfort, as suggested by the percent of students who are willing to go out of state to enroll in this type of institution.

SAT Scores and GPAs

African American students at PWIs have higher test scores and GPAs than their counterparts at HBCUs. This finding is not new. Previous researchers (Fleming & Garcia, 1998; Fleming & Morning, 1998) found similar results in their studies. More indepth analysis of the data illustrates gender differences that provide a different perspective than the totals for all students. These gender differences are discussed in a later section.

Retention theory illustrates the connection between pre-college characteristics – SAT scores, high school GPA – and college characteristics (i.e., academic performance, campus involvement, community connection, faculty involvement) (Bean, 1980; Pascarella, 1980; Tinto, 1975). Fleming and Garcia (1998) found that SAT scores were a better predictor of success for African American students at PWIs in comparision to those attending HBCUs. The results from this study are different. Overall, there were significant correlations between SAT scores and four-year graduation rates - .170 at the 0.01 level for HBCUs and .182 at the 0.05 level for PWIs – however, this correlation is not as high as the one between high school GPA (HSGPA) and four-year graduation, .250 at the 0.01 level for HBCUS and .261 at the 0.01 level for PWIs. Furthermore, according to Fleming and Garcia (1998), the SAT is a poorer predictor of academic performance at HBCUs. Results from this study illustrate a greater correlation (0.266 at the 0.01 level) between SAT C and four-year graduation plus persistence at HBCUs versus a correlation of 0.197 (at the 0.01 level) at PWIs (see Tables 4.11 and 4.12). This high correlation between SAT scores, HSGPAs and graduation rates illustrates why the model is not extremely accurate in predicting the success of students at HBCUs. In traditional circumstances, a high correlation between these variables would translate into a high level of predictability with regard to whether a student will persist and graduate. The ability of this model to predict correctly is only 13%. As mentioned above, researchers have explored the lack of connection between the SAT scores and African American student success. This model, however, relies partially on the connection between SAT

scores and graduation and persistence rates to establish whether a student will persist or not. It follows, then, because the connection between SAT scores and African American student success is not strong that the predictability of this model would be weak as well.

In other words, these data would suggest that the model's inability to predict the success – graduation or persistence – of students is a function of the high correlations between graduation rates and HSGPA and to a greater extent SAT scores. Further, the inability to predict the success of students at HBCUs correctly appears to be a result of the stronger correlations with HBCUs (see Tables 4.11 and 4.12).

Summary

In-state residency is profoundly different between HBCUs and PWIs in this study. Two rationales for this phenomenon are cost and comfort. The significant differences in cost of the institution suggests economics may play a role in the decision to attend a particular type of institution. Furthermore, the HBCUs, according to previous research (Fleming, 1984: Pascarella & Terenzini, 1993) provide a culture that facilitates a higher sense of comfort.

This study finds that SAT scores are higher for African American students attending PWIs in comparison to HBCUs. Incorporating previous research on SAT scores with retention theory suggests that due to the lack of predictability of SAT scores for African American students at HBCUs, these students are more successful than would be observed through a cursory glance at the data and results. In other words, the success of African American students cannot be simply measured by observing their SAT scores

and comparing these to their graduation rates. The ability or inability of these scores to consistently predict the success of African American students must be taken into account.

Research Question 2

Controlling for background characteristics, how do expected and actual graduation rates differ between HBCUs and PWIs?

HBCUs actual and predicted graduation rates are lower overall than those of PWIs.

Taken alone, this piece of information can be misinterpreted to suggest HBCUs are not doing a good job of graduating students; this is not the case. A closer observation of the predicted graduation rates show HBCUs as graduating students at or above their capacity.

Graduation Rates

It must be noted at the outset that the overall graduation rates are dismal and in need of immediate attention. Comparative or descriptive comments by the author should not be construed as acceptance of this condition — quite the reverse is actually the case.

Three general perspectives permeate the discussion of the graduation rates of the students in the sample and must be utilized when interpreting the data — race, class, and gender.

The discussion that follows is developed with these perspectives in mind. It should be noted that the author recognizes the inability to separate these three concepts and their role in student success clearly.

Race: All HBCUs versus All PWIs

There is little difference between four-year actual graduation rates of HBCUs and PWIs. HBCUs have a four-year actual graduation rate of 24%, and the graduation rates for PWIs is 21%. The four-year predicted graduation rates for HBCUs and PWIs are 21% and 30%, respectively, which is a significant difference. An additional significant difference is found when observing the actual four-year graduation plus persistence rates. HBCUs have a four-year plus persistence rate of 42%, and PWIs have a rate of 54%, nearly a 15% difference between the two types of institutions. The real story, however, is that HBCU's graduation rates are three percentage point higher than predicted for fouryear rates and nearly equal to the predicted rate with regard to four-year plus persistence. PWIs, however, are seven points lower than their predicted rate for four-year rates and three points below in regard to four-year plus persistence. In other words, controlling for student differences, HBCUs are performing as well as can be expected, better than expected for four-year and as expected for four-year plus persistence rates. PWIs, however, are doing significantly worse than would be expected for four-year rates and about what is expected for four-year plus persistence rates. These findings seem to fit with literature on campus climate and institutional fit, suggesting that at the institutions with the most comfortable climate, in this case the HBCUs, the integration with the institution takes place at a greater rate thus facilitating the success of the students (Hurtado, 1992; Tinto, 1975). For African Americans students, PWIs have been known to provide an environment that is less than comfortable (Cabrera et al., 1999; Hurtado,

1992; Person & Christenson, 1996). This stress minimizes connection with the institution, and student success – graduation – is not facilitated.

A different method of comparison, comparing the HBCUs to the PWIs as individual institutions prior to aggregating the results, suggests there is more happening than an overall similarity in graduation rates. Controlling for student characteristics allows for the statistical manipulation of quantitative data but does not speak to dynamics of African American student culture that may be at work. The next two sections compare within-state HBCUs and PWIs, allowing for the opportunity to incorporate African American student culture into the graduation rate discussion.

Race: Luapula College versus Luapula University

Luapula College has the highest four-year actual graduation rate (43%) of any of the institutions in the sample. Luapula University has a four-year actual graduation rate of 10%. Four-year plus persistence rates are significantly different between these institutions as well. Luapula College not only over-performs in relation to the predicted graduation rates but is performing overall better than Luapula University. These results are not what is to be expected given the similar academic preparation of the students.

The average HSGPA at Luapula College is 2.70 and 2.85 at Luapula University. Average SAT scores are similar between the institutions as well, 882 at Luapula College and 826 at Luapula University. Several possible explanations for this difference in graduation rates are explored below.

Table 5.2

Luapula Institutions Graduation Rate Data

	4-yr ACTUAL	4-YR PRED.	4-YR+PERS	4-YR+PERS PRED.	IN-STATE RES	TOTAL STUD.
LUAPULA COLLEGE	43%	29%	56%	50%	54.5	650
ALL HBCUs	24%	21%	42%	43%	54.7	2069
LUAPULA UNIVERSITY	10%	26%	48%	53%	91.7	604
ALL PWIs	21%	30%	54%	57%	84.5	1336
ALL INSTIT.	23%	24%	47%	48%	66.4	3405

Aggregate data are weighted by number of students per institution. Data submitted by institution, 1999.

I argue that these results are, at least in part, a function of African American student culture at work at these institutions. The African American student culture perspective in addition to retention and persistence literature and theory suggests that a higher percent of African American students on campus, 90% at Luapula College, helps to facilitate the movement of students toward graduation. Researchers suggest that an environment that contains like individuals helps to provide connection and opportunities for the students (Fleming, 1984; Pascarella & Terenzini, 1993). At an HBCU, the opportunities for interaction or connection with the institution, either through fellow students, faculty, or other areas, are facilitated not only by the comfort that is established by the larger presence of African Americans but also because of a lack of competition for those interactions (Fleming, 1984). In other words, there is a finite amount of time and availability that faculty, administrators, mentors, and peers have available to spend with an African American student in need. At an HBCU, there are simply more African American individuals to serve in these capacities. This potential for increased interaction with the institution is an important conduit through which persistence and graduation are

facilitated (Bean, 1980; Tinto, 1975). The reverse of this situation – there not being enough time or individuals for African American students to interact with – can bring about feeling of isolation and a disconnect from the institution. Hurtado (1992) suggested that when minority students are in an environment where they do not feel appreciated or where there is no concern for the individual student, "racial tension" can be a result. Because they exist in such small numbers on many PWI campuses, African American students often feel neglected or as if they are not a part of the institutional culture (Fleming 1984; Redd, 1998). These feelings of isolation, whether perceived or actual, can have a bearing on a student's decision to persist.

Luapula College has a strong reputation for achievement, and clear expectations are established for students at the onset (Pew Charitable Trusts, 1999). Additionally, Luapula College has a reputation for placing African American students into graduate schools within the sciences and professional schools that is well known. With this reputation, students enrolling at the institution are seemingly aware of this as a step to reaching their goal of graduate/professional school. The apparent methodology of Luapula College seems to parallel retention theory and literature. A student's aspiration to achieve an educational goal beyond the four-year degree, in addition to clear expectations of students, positively influences the chances for persistence and graduation; this seems to be a successful strategy for Luapula (Bean, 1980; Lang & Ford, 1988; Pascarella & Terenzini, 1993).

There is a perspective that suggests that HBCU's success in graduating students is a result of a less demanding or rigorous curriculum (Jencks & Reisman, 1968). This perspective does not explain the difference in the graduation rates between the HBCUs. As is discussed in more detail below, Togo College has the lowest graduation rates in the sample. Given the perspective of these researchers the graduation rates of Togo College should be similar to the other HBCUs as a result of an overall less-demanding curriculum. This is not the case. In actuality, there is a larger disparity between the rates of the HBCUs, both four-year graduation and four-year graduation plus persistence, than there is between the PWIs (see Tables 4.9 and 4.10). These results do not suggest an ease of curriculum that facilitates the graduation of African American students at HBCUs.

Race: Togo College versus Togo University

The graduation rates of Togo University are significantly higher than Togo
College, both four-year actual (27% versus 12%) and four-year plus persistence (57%
versus 39%). However, Togo College slightly under-performs with regard to four-year
graduation rates but performs at capacity in relation to four-year plus persistence rates.
Togo University significantly under-performs when observing actual four-year graduation
rates and slightly under-performs with regard to four-year plus persistence rates.

Considering that Togo College enrolls students with significantly lower HSGPAs (2.30
versus 3.19) and SAT scores (619 versus 953), the graduation rates described above are
somewhat surprising (see Appendix B). It is apparent that something is taking place at
both of these institutions. The data regarding Togo College suggest that even with

students who do not have strong academic backgrounds, they are able to perform as expected. The ability of the students to perform as expected is particularly obvious in terms of four-year graduation plus persistence rates (see Table 5.3). The Togo University data illustrate a lack of connection that sometimes takes place between academic preparation and graduation and persistence. Suggested reasons for this disconnect at Togo University and the "success" of Togo College are explored in more depth below.

Togo Institution Graduation Rate Data

Table 5.3

	4YR ACTUAL	4YR PRED.	4YR+PERS	4YR+PERS PRED.	IN-STATE RES	TOTAL STUD.
TOGO COLLEGE	12%	16%	39%	38%	54.4	1128
ALL HBCUS	24%	21%	42%	43%	54.7	2069
TOGO UNIVERSITY	27%	34%	57%	60%	63.4	355
ALL PWIS	21%	30%	54%	57%	84.5	1336
ALL INSTIT.	23%	24%	47%	48%	66.4	3405

Data submitted by institution, 1999.

Some researchers have argued that HBCUs in general graduate students at higher rates because of a lack of academic rigor (Jencks & Reisman, 1968). Togo College has only recently incorporated admissions requirements for students, it was open admissions, while Togo University has maintained its status as a moderately selective institution for decades, with much higher HSGPAs and SAT scores than Togo College (see Appendix B). To some extent, these facts might support those suppositions. More recent work, however, indicates that HBCUs capacity to create an environment that facilitates graduation is not a function of easier course work or less intellectual challenge (Bohr et al., 1995). In sum, these researchers indicated that the ability of HBCUs to facilitate the

graduation of their students does not "come at the cost of intellectual and academic rigor" (Bohr et al., 1995).

Although I am in agreement with the argument that suggests academic rigor is not compromised at HBCUs, I would argue a further step needs to be made to begin to illustrate and fully understand the success of these institutions. African American students are different. Data from this research suggest they come from different places economically, and the literatures goes even further to indicate the differences are cultural as well (Garibaldi, 1984; Person & Christenson, 1996; Redd, 1998). HBCUs, as a result of their history, traditions, and missions, are quite different institutions from PWIs. Why, then, given this background – HBCUs are different types of institutions, and African American students are different types of students – are they often studied, criticized, and explored utilizing models, theories, and concepts that are adjusted for them as opposed to built for them? One possible explanation is African American students and HBCUs are studied in an effort to get them to be like or conform to the comparison group (i.e., the White students or institutions) in practices, procedure, goals, and missions. A second explanation is that perhaps researchers have been trained, in general, to view the world of education from a White perspective which, no matter the intentions, leads them to suggest, develop, or advise HBCUs and African American students in a method not conducive to their organizational or individual success. The success of an HBCU or African American student should not be measured by how close to the standard they are

able to come unless they were truly taken into consideration when this standard was developed.

Class: An Economic Perspective

This discussion of African American student success is incomplete without mention of the class dimension. Although class is a representation of various factors only one, economics, is discussed here.

Wirth (1938) suggested that social problems such as the poor graduation rates of African American students are the results of group or individual adjustments to social conditions. One of the social conditions that influence low graduation rates of African American students is a lack of a strong economic base. A college education can be expensive, and families actual or perceived ability to maintain the financial commitment can affect retention (Somers et al., 2000). Data from the U.S. Census Bureau (1990) illustrates the great divide, economically between Black and White families. The median family income for a Black family is \$26,522. This is 59% of \$44,756 which represents the average White family income. Further, the median net worth of a Black family is one-tenth the net worth of White families (\$4,418 versus \$45,740). As a result of the current financial foundation, or lack thereof, many African American students begin their college careers with the economic factors stacked against them.

The lack of a financial base is further exacerbated by the increased segregation between African American and White persons because it does not allow a pooling of knowledge and resources for the benefit of the entire community (Wirth, 1938).

Extending Wirth's (1938) perspective, Smith (1998) suggested that because HBCUs are often predominantly African American they are continually in the position of not being able to assist their students fully in gaining financial stability. This inability to assist the students fully often allows the status quo to go unchallenged in an area where it must be challenged the most (Smith, 1998).

As mentioned in Chapter 4, all of the states in the study have a higher percentage of Blacks living below the poverty line than the national average (see Table 4.2). In three of the states, one out of three Black persons are living in poverty. In one state, Luapula, 44% of the Black persons live below the poverty line. The state average for Whites in this state is approximately 13%. The national average is approximately 13% as well. The lack of financial resources affects the mindset of individuals and the priorities of currently enrolled and potentially enrolling students alike. Indeed, it is difficult to consider the details of an equation for a final exam when you are hungry or are not sure whether an eviction notice will be on your door when you return home.

In Luapula, where economics are the worst for African Americans in this study, one might assume that at Luapula College, an HBCU, where the tuition is the highest in the sample, graduation rates would be the lower given the connection between cost and persistence. As illustrated in Chapter 4, Luapula College has the highest graduation rates in the sample. Luapula College, as discussed in the previous section, has developed a methodology that results in African American student success. This methodology is apparently effective enough to offset some of the results of financial distress.

A closer inspection of Togo College further supports the idea that there is more happening at Luapula College than the fact that it is an HBCU. Togo, as a state, has the second highest percent (33.1%) of individuals living below the poverty line. Togo College has a tuition nearly one-third that of Luapula College. The graduation rates for Togo College are, overall, the worst in the study. It is apparent that something is happening at Togo College that is different from Luapula College. One assumption might be that Togo College appears to be lacking the development of an approach that is effective for student success, and the fact that it is an HBCU does not offset this. Another assumption might be that as a public institution, Togo College provides a different set of values or culture that are not as effective in facilitating the retention and persistence of African American students.

Additional reasons for the lack of success for Togo College must be attributed to the type of student who attends. As mentioned previously, this study attempted to control for certain student characteristics, but it is impossible to quantify all of the factors. Study habits, note-taking skills, motivation, and perseverance are all examples of factors that could be potentially attached to a successful student. Conversely, one might argue that a student who has a low HSGPA and/or test scores may not possess these attributes. In sum, although the results are obvious – Togo College has a low graduation rate – there are undoubtedly other factors that are at work in facilitating or impeding the success of the students who attended.

Gender: A Female Perspective

Overall, women are graduating at higher rates than the men in the sample (see Tables 4.9 and 4.10). Fleming (1984) suggested that African American women relate to other students, faculty, staff, and administrators differently from African American men, that is, they use cooperation as opposed to competition. Other researchers have suggested that women, in general, react and interact differently than men, in particular with regard to authority and knowledge, and are better at networking and developing connections (Belenky, Clinchy, Goldberger, & Tarule, 1986). This method of interacting with others in an educational environment is in line with the literature that suggests individuals who are more connected or integrated to the institution are more likely to graduate (Tinto, 1975).

Another rationale for the overall higher rates for women relates to pre-college characteristics. Although this research model is designed to control for student characteristics, there are factors associated with these characteristics that cannot be completely controlled. Factors such as study habits, internal and external motivation to do well in school, note-taking skills, and a variety of others that can affect student success are not measured in this study. If the difference between the pre-college characteristics of the men and women were not great, then conceivably the difference between related factors would not be as great. The difference between males and females is significant, however, and conceivably the difference between the factors that cannot be controlled by this study are great as well (see Tables 4.9 and 4.10).

Gender: A Male Perspective

Fleming (1984) suggested that African American males have the most difficulty in adjustment to college at PWIs, due in part to the competition issues with White males and the relegation to a sub-dominant male status that is continually reinforced. This relegation to sub-dominant status is partnered with a variety of stereotypical ideas of African American males that facilitate the continued downward mobility of these individuals. Stereotypes such as being aggressive, unintelligent, intimidating, and "ghetto" or low class cannot be overlooked in terms of their influence on the culture of the institution or how this institutional culture affects the students. The additional danger of these stereotypes is that they often have a self-fulfilling prophecy attached. In other words, if African American students are continually bombarded with the idea that they are not as intelligent, they likely begin to believe that they are not as intelligent as their White counterparts.

Although it is apparent that the graduation rates for African American males at PWIs are poor at best, it is my interpretation that whatever the level of attainment for African American men at PWIs in this study, it is in no small part related to the policies and practices of the National Collegiate Athletic Association (NCAA). Policies and procedures in terms of student athletes (Proposition 16) have forced athletic departments to change the way they do business with regard to the student athlete; as a result, many African American males have been affected. An initial response to Proposition 16, the incorporation of higher eligibility requirements for student athletes, is simply to state the

graduation rates are higher because "smarter" students were admitted. I believe this is a simplistic response that does not take other factors into consideration.

Due to the low numbers of African Americans males attending many PWIs and the relatively high proportion of African American males in the athletic programs at these institutions, a significant number of the African American males enrolled are involved in athletics. Athletic departments are required by NCAA policies to ensure students are making satisfactory academic progress, or they are punished through both loss of scholarships and the potential loss of the eligibility of a player. As a result, athletic departments have set up "good pracetices" that assist the players in maintaining their eligibility. The use of tutors, study halls, peer intervention, frequent faculty/coach interaction and in some cases groupe living arrangements are all practices that have been positively correlated to the success of students.

Additionally, concepts of campus climate and institutional fit must be readdressed from the perspective of the athlete. Because so many African Americans are involved in athletics at PWIs and they spend an enormous amount of time together bonding with peers, coaches, tutors, etc, the normal "rules" of integration and campus climate may not apply to the athletic department at \approx PWI.

I differentiate between athletic programs at PWIs and HBCUs in this sample. The PWIs are all large Research I institutions with Division I programs. Division I programs are more highly scrutinized by the INCAA; in addition, they are well-financed in terms of support for student athletes. HBCUs are not as well funded, in part due to their overall

size or their Division II or III status. These conditions, combined with the history of underfunding of HBCUs, suggest a key advantage for athletes at PWIs. This advantage expresses itself in the utilization of peer tutors, study tables, living arrangements, the ability to provide larger numbers of scholarship and a variety of other amenities that are not only beneficial to the institution but to the academic lives of the student athletes as well.

Implications

The results and conclusions of this research project suggest several areas in which policy makers can begin to make adjustments that would effect positive change for the African American student bodies at their institutions.

Policy makers at institutions, whether HBCUs or PWIs, should consider determining their institutional graduation rate controlling for student differences.

Utilizing the institution as the unit of analysis places the onus on the institution to effect change for the benefit of the student as opposed to "blaming" the student for not being properly prepared. In determining the institutional graduation rates, institutions should be careful to incorporate student, and later institutional, characteristics that are theoretically sound. Theoretically sound variables include those that have been researched and expressed in the literature as having an effect on graduation rates of African American students. The often-used variables such as HSGPA, residency, SAT scores, and family income should be utilized in conjunction with variables from research from the African American perspective that have been shown to affect the success of students. Wagoner

and Nettles (1998) suggested that community involvement is important to student success. Development of a measure by which this community involvement could be measured could prove extremely useful in identifying just how influential the community is to the success of an African American student. Somers et al. (2000) discussed how legislation and policies dictating admissions policies of institutions would have a role in student retention. Monroe (1994) discussed the importance of African Americans having influence in the development of education policies that affect African Americans. Each of these variables in addition to others would help to enlighten administrators further as to the needs of students and how an environment can be developed to facilitate their success. Incorporating the proper variables will provide the institutions with a database that is theoretically grounded and supported by relevant literature.

Special attention should be allotted to gender differences as graduation rates are analyzed and programs developed. My findings suggest significant differences in the needs of African American males and females that if not addressed properly can have devastating and long-term results. For example, PWIs would do well to investigate the success of their own athletic departments. This may provide institutions with a tested model on their own campuses that can be transferred to the non-athlete population. The money, time, and expense seem to have paid dividends for both the athletic programs and the students. This type of commitment, albeit at the behest of the NCAA, has brought about change as it relates to African American males and should not be dismissed.

Additionally, university officials would be well served to address issues of racial disharmony in a realistic and open fashion. The dismal graduation rates of African American students have long been attributed to the comfort level of the institutions in question. This comfort level has been poorly addressed, and, as a result, graduation rates over time for African American students – males in particular – have remained relatively constant. In other words, PWIs are uncomfortable and often irritating places for many African American students, and it is logical and rationale to assume the stress that develops as a result places the academic success of the students at risk.

PWIs should make themselves aware of the cultural climate of their institutions. I would argue that one of the attributes that can be readily attached to a PWI is that it is often uncomfortable for minorities in general and African Americans in specific. This discomfort is facilitated by a lack of African American staff, administrators, faculty, and students. Hiring practices need to be examined to ascertain their impact on climate at PWIs. If hiring of professionals is not an available option due to financial constraints or lack of personnel in the field, perhaps programs designed to bring in minority professionals would be of use. For example, offering African American doctoral students one-half time or three-quarters time teaching or administrative positions while they are finishing their doctoral work would help not only increase the number of African American Ph.Ds, but it would provide these institutions with the initial opportunity to hire potentially scarce individuals.

Student affairs' professionals should take precautions against attempting to solve cultural climate issues by simply establishing offices to deal with minority or African American students' needs. That is not to say that cultural centers, minority recruitment programs, etc., are not useful. It is to say that a further part of the responsibility of student affairs' professionals is to provide continued opportunities for students to become interwoven to the fabric of the institution.

Admissions policies also need to be evaluated for heavy reliance on pre-college characteristics. As the data show, graduation, although connected to, is not solely predicated on students' pre-college characteristics. Other methods for evaluating students for admission must be developed and utilized.

Outreach programs that begin prior to decision time for high school juniors and seniors are possibly the most important step that can be taken to enhance later success. Junior high students would benefit from visits and programs at PWIs facilitated by African American and White administrators, faculty, staff, and students. Further, these outreach programs need to begin to teach students, in particular male students, the benefits of a cooperative method of interaction as opposed to, or in conjunction with, the competition-oriented perspective. Activities teaching these skills would be of particular benefit to African American males whether involved in athletic activities or not.

PWIs need to evaluate the training or education the White students receive at their institutions. If a multicultural environment is the goal or mission of the institution, then the development of the majority student, staff, and faculty population to this end is

critical. Efforts in the area of diversity training and understanding need to be mainstays of professional development curriculums at both PWIs and HBCUs. It should be noted that the building of a cultural center or the development of an African American studies center is not a method of fixing the issues addressed here. I would argue that as long as an institution has a cultural center for students and it is being utilized, the institution is not a truly multicultural environment. A multicultural environment would have no need for a cultural center to provide comfort and refuge for a particular group of people; this should be the goal of administrators.

With regard to HBCUs, it can be simply stated that they need resources. It appears from the data that these institutions have been doing as well as expected and in some cases significantly better than expected with scant resources (historically) and comparatively speaking, a more academically challenged student body. If resources are not forthcoming from state and federal sources, HBCU administrators and faculty need to continue to take advantage of grant opportunities and partnerships with outside agencies. Contacts with alumni should be exploited and development offices established. HBCUs must leave no stone unturned in their search for financial assistance; they have proven their ability to graduate students with minimal funding, and the next step is to see how well they can do with funding.

Lastly, HBCUs have an obligation to reach out to the PWIs and continue to educate them about the needs of the African American students on PWI campuses. This can be accomplished by HBCU administrators maintaining a strong presence in

professional organizations both as presenters and general participants. Additionally, PWI administrators need to be forthcoming about the shortcomings of their institutions. These first steps would then need to be followed by an exhaustive exchange of successful activities and philosophies. Continued partnerships between HBCUs and PWIs are crucial to the success of African American students at both institutions.

In the development of programs, whether at HBCUs or PWIs, it is necessary to be careful to tailor programs and policy changes to the institution, its history, particularly student body and mission. Patterning behind a successful program at another "peer" institution does not guarantee success; paying close attention to students' particular needs and the uniqueness of the institutions will, however, increase chances of success.

Limitations and Implications for Further Study

The most significant limitation of this research was the size of the sample.

Although the small number of institutions did allow for a more in-depth analysis, the ability to generalize is severely restricted. All HBCUs, like all PWIs, are not alike, and although care was taken to attempt to retrieve information from like institutions the differences between institutions, even of similar ethnic makeup, preclude blanket assessments of the causes or cures of issues. In other words, these institutions, regardless of ethnicity, are not alike, and care must be taken in generalizing results.

Time was an additional limitation; given more time, other researchers should be able to develop connections with a larger number of institutions and receive the required

data from them. Further research may also consider the addition of institutional characteristics to the model to attempt to explain a more of the variance.

The incorporation of ffive-year and perhaps six-year graduation data would lend credence to the conclusions of this study. The assumption that students who persist beyond four years will graduate is useful; however, actual graduation data are, of course, much better.

When the students in the study are separated into two groups – those who graduated and persisted and those who did not – it is observed that the model in use for this project was much better at predicting the students who did not continue as opposed to those who persisted and graduated. This is as a result of the heavy reliance on pre-college characteristics as predictive variables. In an effort to develop a model that is better at predicting success of African. American students, researchers must incorporate variables that are perhaps non-traditional in nature. Examples might include high school demographics or number and type of role models – family, athletic, high school affiliated, university affiliated – this type of information may begin to shed light on the factors that weigh heavily with regard to student persistence.

The inability of this remodel to measure what takes place when students leave also provides a limitation for this study. Students leaving an institution may transfer to other institutions and graduate; this model does not account for that eventuality. More specifically, there is no information in this study that accounts for transfers, in particular transfers to and from HBCUss.

Expansion of this work should include not only five-and six-year graduation rates in addition to more institutions but follow up with some of the institutions that were over-or under-performing from a qualitative perspective. Visits to institutions to determine the campus climate and attitudes of faculty, administrators, staff, and students would provide practitioners with additional information with which to determine changes at their own institutions. This type of work would provide an idea of successful practices and perhaps allow policy makers to see a pattern in the type of programming that is successful for African American students, whether at HBCUs, PWIs, or both.

Of particular concern is the base assumption in the literature that students and institutions are more alike than they are different. History, culture, tradition, values, and a variety of other variables come into play in the development of an individual as well as an institution. To assume that because institutions give out degrees with the same names or report to the same governing body they are intrinsically similar can cause a variety of frustrations. Institutions develop culture individually and collectively (e.g., HBCUs and PWIs). The ability to identify and understand these cultural differences will help facilitate the success of students.

My research has been an attempt to incorporate the frameworks of retention, persistence, and graduation rates with the concepts of African American culture, the African American student perspective, and student success for the purposes of investigating retention and graduation rates of ethnically and culturally different institutions. My research represents a step in the direction of establishing institutional

responsibility for the retention, persistence, and graduation of students in general and African American students in particular. This study is a part of a body of literature that will assist institutions in providing the opportunity for developing, educating, and graduating students of all kinds regardless of type of institution or the characteristics of the student.

APPENDIX A

Institutional Characteristics

Luapula College (HBCU

Luapula College is a private institution with a total of 650 African American students. Luapula College has the largest disparity among the HBCUs with regard to numbers of male (176) and female (474) students and ranks second only to Chad University in this area when taking all six of the institutions into account. Luapula College has a student body that consists of 90% African Americans, the highest percentage in the sample, and its total population includes 98% minorities.

Tuition and fees for both resident and non-resident students at Luapula College are \$8,900; this amount does not change for out-of-state students. Room and board for the on-campus residents is \$5,100, and an additional \$1,365 is estimated for miscellaneous expenses. Luapula College is the most expensive HBCU in the sample and has the highest in-state tuition of all the institutions. Luapula College also has a high percent of individuals (90%) receiving financial aid.

Table A.1

LUAPULA COLLEGE (African American Students)

Total Students	650
Male	27%
Female	73%
% In-State	55%
% A A	90%
Tuition & Fees (all Students)	
In-State Tuition	8900
Out-of-state tuition	8900
Room & Board	5100
Misc. expenses	1365
% Financial Aid	90%

Data submitted by institution, 1999.

Luapula University (PWI)

Luapula University has 604 individuals in the study with males representing 34% and the females 66% of the population. The minority student enrollment at Luapula University is 15% with a 10% African American enrollment.

Luapula University has the lowest tuition and fees, in state or out-of-state of any PWI in the sample, \$2,881 and \$7,081 respectively. The only institution in the study with a lower in-state and/or out-of-state tuition is Benin College. Room and board fees are comparable to the other institutions in the sample. Luapula University has a relatively low number of students in the sample (50%) receiving financial aid.

Table A.2

LUAPULA UNIVERSITY (African American Students)

Total Students	604
Male	57%
Female	43%
% In-State	92%
% A A	10%
Cuition & Fees (all Students)	
In State Tuition	2881
Out of state tuition	7081
Room & Board	4130
Misc. expenses	1852
% Financial Aid	50%

Data submitted by institution, 1999.

Togo College

Togo College has the largest African American enrollment in its 1990 cohort (n = 1,128). Of this number, 673 or 60% are female, and 455 males make up the remaining 40% of the sample. Togo College ties with Luapula College for the lowest percentage of in state residence (54%). Due, however, to its larger sample size, Togo has the most instate students.

Togo College had the largest percentage of minority students (99%) in the sample. Luapula College, however, is just above Togo College in percentage of African American students, 90% and 89% respectively.

Tuition for Togo College is \$3086 for in-state students and \$8630 for out-of-state

students. Room and board is \$5096 and is comparable to the rest of the institutions in the sample. Similar to the rest of the HBCUs, Togo College has a fairly high number of students (85%) on financial aid.

Table A.3

TOGO COLLEGE (African American Students)

Cotal Students	1128
Male	40%
Female	60%
% In-State	54%
% A A	89%
uition & Fees (all Students)	
In - State Tuition	3,086
Out-of-state tuition	8,630
Room & Board	5,096
	21 11.11.1
Misc. expenses	!/###

Data on Misc. expenses was not available.

Data submitted by institution, 1999.

Togo University (PWI)

Togo University has the smallest population of African American students in its cohort (n = 92) in the sample. Although the actual numbers differ greatly, the proportion of men to women at Togo University (46%: 54%) and Togo College (40%: 60%) are similar. Of the total African American student population at Togo University, 78% are in-state residents.

Togo University has the second - highest percentage of minority students (15%) of the PWIs in the sample. Togo University has an African American student population that represents 5% of the total.

Tuition at Togo University is \$3,620 for in-state tuition and \$11,844 for out-of-state tuition and fees. Togo University's out-of-state fee is the highest of any of the institutions in the sample. Room and board fees of \$3,865 are comparable to the other institutions yet the estimated miscellaneous expenses of \$3,320 are the highest. The miscellaneous fees include the mandatory purchase of a laptop computer. Even with the highest overall out-of-state tuition and a comparable in-state tuition, Togo University, along with Luapula University, has the lowest percent (50%) of students with financial aid.

Table A.4

TOGO UNIVERSITY (African American Students)

otal Students	355
Male	45%
Female	55%
% In-State	63%
% A A	5%
In - State Tuition	3620
	3 <i>6</i> 20 11,844
In - State Tuition	
Out - of - State Tuition	11,844

Benin College

Benin College is the smallest of the HBCUs (n = 291). It is, however, the institution with the most even split between men and women, 47% and 53% respectively. African American students appear to be drawn equally as well from out-of-state and in state as demonstrated by 56% of the students being in state.

Benin College is unique among the HBCUs in this study, in that it does not have a majority of African American students enrolled on campus. Benin College has the lowest percent of minorities (70%) among the HBCUs. Additionally, it is also lowest among HBCUs in percent of African American students (42%). This is not unique among HBCUs nationwide; other institutions have shifted from institutions that serve a majority African American population to those that now serve a majority White population. Benin College has the lowest tuition both in - state (\$2,020) and out-of-state (\$6,060). The room and board fees for Benin College (\$3,446) are also the lowest. This is also true of the estimated miscellaneous expenses of \$280. Interestingly, the percent of freshmen on financial aid at Benin College is still fairly high.

Table A.5

BENIN COLLEGE (African American Students)

Fotal Students	291
Male	47%
Female	53%
% In-State	56%
% A A	42%
Tuition & Fees (all Students) In State Tuition	2020
	2020 6060
In State Tuition	
Out of state tuition	6060

Data submitted by institution, 1999.

Chad University (PWI)

Chad University had 377 African Americans in its 1990 cohort. Females represent 74% of this number. Slightly higher than Luapula College (73%), Chad University is the institution with the highest percent of African American females. Chad University also has the highest percent of individuals (93%) with in-state residency. The next closest institution is Togo University with 78%.

Chad University has the lowest percent of minorities (10%) in the entire sample. The same can be said of the percent of African Americans (3.9%) at Chad University. The closest institution in percent of minorities and African Americans is Luapula University with 15% and 10%, respectively.

In-state tuition and fees at Chad University are \$3,034, between Togo University at \$3,620 and Luapula University (\$2,881). Out-of-state tuition is \$10,276, the second highest in the entire sample, with Togo University first at \$11,844. Room and board fees at Chad University are \$4,902, once again the highest PWI in the sample. The highest percent of individuals on financial aid at a PWI is at Chad University where 69% percent of incoming freshmen receive some type of financial aid.

Table A.6

CHAD UNIVERSITY (African American Students)

Total Students	377
Male	26%
Female	74%
% In-State	92%
% A A	3.9%
Tuition & Fees (all Students)	
In State Tuition	3034
Out of State Tuition	10,276
Room & Board	4902
Misc. expenses	1800
% Financial Aid	69%

APPENDIX B

Student Characteristics

Luapula College

Luapula College had an African American population of 650 in its 1990 cohort and data were received on all 650 cases. The mean GPA for the students at Luapula College is 2.70 and this is the highest of all HBCUs and .15 less than the 2.85 for Luapula University, which is the lowest PWI. The SAT scores at Luapula College are also the highest (882) HBCU in the sample. Luapula also ranks above Luapula University (826) in this category.

The males at Luapula College have a lower GPA than their female counterparts, 2.43 and 2.79, respectively. The mean SAT scores are much closer, however, with the men scoring 882 and the women scoring a little higher at 887.

Table B.1

LUAPULA COLLEGE STUDENT DATA

Characteristics	All	Male	Female
Mean GPA	2.70	2.43	2.79
Mean SAT	882	870	887
4 yr. Grad Rate (actual)	43%	40%	45%
4 yr. Grad Rate (pred.)	29%	18%	33%
4 yr. Pers Rate (actual)	56%	54%	57%
4 yr. Pers Rate (Pred.)	50%	44%	53%

Luapula University

Luapula University had an African American student population of 604 in its 1990 cohort. The average GPA for these students is 2.85, lowest of the PWIs; Togo University has the highest at 3.19. The average SAT scores of the students at Luapula University are the lowest (826) among the PWIs. Once again, students attending Togo University (953) have the highest test scores.

The female students at Luapula University have a GPA of 2.97 and an SAT mean score of 818. These are both higher than those of their male counterparts who have a GPA of 2.62 and an SAT average score of 841.

Table B.2

LUAPULA UNIVERSITY STUDENT DATA

Characteristics	All	Male	Female
Mean GPA	2.85	2.62	2.97
Mean SAT	826	841	818
4 yr. Grad Rate (actual)	10%	6%	13%
4 yr. Grad Rate (pred.)	26%	17%	30%
4 yr. Pers Rate (actual)	48%	51%	43%
4 yr. Per Rate (pred.)	53%	56%	56%

Togo College

Togo College had an African American 1990 cohort population of 1,128, with 1,121 useable cases in the sample; this is the largest number of cases in the study. With an average GPA of 2.30, Togo College has the lowest GPA and SAT scores (619) in the study. The next highest GPA and SAT score belong to Benin College, 2.47 and 757, respectively.

The African American men at Togo College have the lowest GPA (2.15) of any group. The SAT scores for Togo College men (619), however, is slightly higher than Togo women (615). Females at Togo College, although possessing a higher GPA (2.40), are the lowest female group in any of the institutions. The SAT scores of the women (615) are also the lowest in the female samples and also lowest in the entire sample.

Table B.3

TOGO COLLEGE STUDENT DATA

haracteristics	All	Male	Female
Mean GPA	2.30	2.15	2.40
Mean SAT	619	628	615
4 yr. Grad Rate (actual)	12%	4%	18%
4 yr. Grad Rate (pred.)	29%	10%	19%
4 yr. Pers Rate (actual)	56%	34%	43%
4 yr. Pers Rate (pred.)	50%	34%	41%

Togo University

Togo University has the smallest African American enrollment of the PWIs, with 355 students. Togo University students possess the highest GPA (3.19) in the sample. The students at Togo University also have the highest SAT scores of any institution among PWIs.

Females at Togo University have an average GPA of 3.29 and test scores of 951. Men have GPAs of 3.10 and SAT scores of 955. These sets of scores are the highest of any institution in the sample.

Table B.4
TOGO UNIVERSITY STUDENT DATA

Student Characteristics	All	Male	Female
Mean GPA	3.19	3.10	3.29
Mean SAT	953	955	951
4 yr. Grad Rate (actual)	27%	24%	31%
4 yr. Grad Rate (pred.)	34%	27%	42%
4 yr. Pers Rate (actual)	57%	57%	57%
4 yr. Per Rate (Pred.)	60%	57%	64%

Data submitted by institution, 1999.

Benin College

Benin College has 291African American students. The mean GPA for students at Benin College is 2.47. This is second highest among the HBCUs. With an SAT average of 757, Benin College is second highest in this area as well.

Females at Benin College have a mean GPA of 2.59 and average SAT scores of 751. The males at Benin College have lower GPAs (2.33) but higher SAT scores. This is

consistent for two of the HBCUs, Benin College and Togo College.

Table B.5

BENIN COLLEGE STUDENT DATA

Student Characteristics	All	Male	Female
Mean GPA	2.47	2.33	2.59
Mean SAT	757	762	751
4 yr. Grad Rate (actual)	24%	18%	29%
4 yr. Grad Rate (pred.)	20%	14%	25%
4 yr. Pers Rate (actual)	27%	19%	34%
4 yr. Per Rate (pred.)	43%	39%	46%

Data submitted by institution, 1999.

Chad University

Chad University had an African American enrollment of 377. The GPA of the students at Chad University is 3.15; this is the second highest in the study. The SAT score of 917 is the second highest in the sample as well.

The female sample at Chad University has a mean GPA of 3.19 and a mean SAT of 911. Following the same pattern as Togo College and Benin College, the males at Chad University have lower GPAs (3.04) and higher SAT (917) scores.

Table B.6

CHAD UNIVERSITY STUDENT DATA

Student Characteristics	All M	ale Female
Mean GPA	3.15	3.04 3.19
Mean SAT	917	930 912
4 yr. Grad Rate (actual)	31%	25% 34%
4 yr. Grad Rate (pred.)	32% 2	2% 35%
4 yr. Pers Rate (actual)	61%	61% 61%
4 yr. Pers Rate (pred.)	60%	56% 62%

APPENDIX C

Graduation Rates

Luapula College

Luapula College has the highest four-year actual graduation rate (43.1%) of any institution in the study, over 10 points higher than the nearest institution and 14 points higher than the predicted graduation rate. This indicates that Luapula College is graduating students at a much higher rate than would be predicted based on entering students characteristics. The actual four-year graduation plus persistence rate (56%) and the predicted four-year graduation plus persistence rate (50%) are much closer for the students at Luapula College. Simply stated, Luapula students graduate well above what is predicted in four years and when adding those who persist, the numbers are very close to what would be expected (see Table C.1).

Togo College

Togo College has the lowest actual four-year graduation rates (12.1%) of any institution in the sample; however, it only slightly under-performs in relation to the predicted graduation rate of 16%. Togo College's four-year graduation rate plus persistence rate is the overall second lowest in the sample at 39%. This number is nearly equal, however, to Togo College's predicted four-year plus persistence rate which is 38% (see Table C.1).

Table C.1

HBCU Student Graduation Rates

	4-YR ACTUAL	4-YR PRED.	4-YR+PERS	4-YR+PERS PRED.	IN-STATE RES	TOTAL STUD.
LUAPULA COLLEGE	43%	29%	56%	50%	54.5	650
TOGO COLLEGE	12%	16%	39%	38%	54.4	1,128
BENIN COLLEGE	24%	20%	27%	43%	56.0	291
ALL HBCUs	24%	21%	42%	43%	54.7	2,069
ALL INSTIT.	23%	24%	47%	48%	66.4	3,405

Aggregate data are weighted by number of students per institution. Data submitted by institutions, 1999.

Benin College

Benin College is one of the two institutions – Luapula College is the other – in the sample that is over-performing (24% versus 20%) with regard to the four-year actual graduation rate. There is a shift, however, that takes place when four-year plus persistence is taken into account that is unique to Benin College. The four-year plus persistence rate for Benin College of 27% is almost 20 points less than the predicted four-year graduation plus persistence rate of 43% (see Table C.1).

Luapula University

Luapula University has the lowest actual four-year graduation rate at 10%. The predicted four-year graduation rate is over 15 points higher (26%) than actual, which means Luapula University is under-performing in terms of its capacity to graduate students. Comparing the four-year plus persistence data, there is a marked increase in the rate to 48%, but when compared to the predicted four-year plus persistence rate (53%), Luapula University still under-performs (see Table C.2).

Togo University

Togo University has a four-year actual graduation rate of 27% and a predicted graduation rate of 34%. Togo University is under-performing in terms of its capacity to graduate students within four years. The four-year plus persistence rate (57%) shows Togo University as fairly close to the predicted graduation plus persistence rate of 60% (see table C.2).

Table C.2

PWI Student Graduation Rates

	4-YR ACTUAL	4-YR PRED.	4-YR+PERS	4-YR+PERS PRED.	IN-STATE RES	TOTAL STUD.
LUAPULA UNIVERSITY	10%	26%	48%	53%	91.7	604
TOGO UNIVERSITY	27%	34%	57%	60%	63.4	355
CHAD UNIVERSITY	31%	32%	61%	60%	92.8	377
ALL PWIs	21%	30%	54%	57%	84.5	1,336
ALL INSTIT.	23%	24%	47%	48%	66.4	3,405

Aggregate data are weighted by number of students per institution. Data submitted by institutions, 1999.

Chad University

Chad University has the highest four-year actual graduation rate (32%) of any of the PWIs and is second to Luapula College (43%) for highest in the sample. The actual four-year graduation plus persistence data (61%) and the predicted four-year graduation plus persistence data (65%) are both the highest in the sample for Chad University. The next closest is Luapula University with rates actual and predicted graduation plus persistence rates of 55% and 67%, respectively (see Table C.2).

References

- Ackerman, S. P. (1991). The benefits of summer bridge programs for underrepresented and low-income students. College and University, 66 (4), 201–208.
- Allen, W. (1987). Black colleges vs. white colleges: The fork in the road for Black students. Change, 19, 28–39.
- Allen, W., Epps, E., and Haniff, N. (Eds.). (1991). College in Black and White: African American Students in predominantly white and historically black public universities. New York: SUNY Press.
- Astin, A. (1968). Undergraduate achievement and institutional "excellence". Science, 161, 661-668.
- Astin, A. (1975). Preventing students from dropping out. San Francisco: Jossey-Bass.
 - Astin, A. (1977). Four critical years. San Francisco: Jossey-Bass.
- Astin, A. (1997). How "good" is your institution's retention rate? Research in Higher Education, 38, (6), 647-658.
- Bean, J. P., (1980). Dropouts and turnover: The synthesis and test of a causal model of student attrition. Research in Higher Education, 12, 155–187.
- Bean, J. P. (1982). Conceptual models of student attrition: How theory can help the institutional researcher. In E.T. Pascarella, (Ed.), <u>Studying student attrition</u>, (pp 17 33). San Francisco: Jossey-Bass.
- Bean, J. P. (1985). Interaction effects based on class level in an explanatory model of college student dropout syndrome. <u>American Educational Research Journal</u>, 22 (1), 35–64.
- Bean, J. P., & Vesper, N., (1992, October). Student dependency theory: An explanation of student retention in college. Paper presented at the annual meeting of the Association for the Study of Higher Education, Minneapolis, MN.
- Bean, J. & Vesper, N., (1994). Gender differences in college student satisfaction. Paper presented at the annual meeting of the Association for the Study of Higher Education, Tucson, AZ.

- Belenky, M. F., Clinchy, B. M., Goldberger, W. R., and Tarvle, J. M. (1986). Women's ways of knowing: The development of self, voice and mind. New York: Basic Books.
- Bohr, L., Pascarella, T. E., Nora, A., Terenzini, P. T. (1995). Do black students learn more at historically black or predominantly white colleges? <u>Journal of College Students Development</u>, 36 (1), 75-85.
- Bowles, F., and Decosta, F. A. (1972). <u>Between two worlds: A profile of negro</u> higher education. Hightstown, NJ: McGraw-Hill.
- Branson, H. (1978). A prime assessment for black colleges: The role of blacks in the sciences and related fields. <u>Debate and Understanding</u>: A Journal for the Study of Minority Americans' Economic, Political and Social Development, 240–251.
- Braxton, J. M., Sullivan, A.V. S., Johnson R. M. J. G. (1997). In Smart, J. C., (Ed.), <u>Higher education: Handbook of theory and research volume XII</u> (pp. 107–164). New York: Agathon.
- Brazzell, J. C., (1996). Diversification of post-secondary institutions. In S. R. Komives & D. B. Woodard (Eds.), Student services: A handbook for the profession (pp. 76-90). San Francisco: Jossey-Bass.
- Brown, A. (1963). The Role of Integration in Education. Unpublished manuscript, SUNY, Plattsburgh.
- Cabrera, A. F., Casteneda, M. B., Nora A., and Hengstler, D. (1992). The convergence between two theories of college persistence. <u>The Journal of Higher Education</u>, 63, 143–164.
- Cabrera, A. F., Nora, N., Terenzini, P. T., Pascarella, E., and Hagedorn, L. S. (1999). Campus racial climate and adjustment of students to college: A comparison between white students and African American students. The Journal of Higher Education, 32 (2), 134–160.
- Chenoweth, K. (1999). HBCU's tackle the knotty problem of retention. Black Issues in Higher Education, 40, 39–41.
- Cross, P., Astin, A., (1981). Factors influencing Black students' persistence in college. In G. Thomas (Ed.). Black students in higher education. (pp.76-90). Westport, CN: Greenwood Press.

- Davis, J. E. (1998). Cultural capital and the role of historically black colleges and universities in educational reproduction. In K. Freeman, (Ed.), <u>African American Culture and Heritage in Higher Education Research and Practice</u>, (pp. 143–153). Westporte, CT: Praeger.
- Fleming, J., and Morning, C. (1998). Correlates of the SAT in minority engineering students: An exploratory study. <u>Journal of Higher Education</u>, 69 (1), 89–108.
- Fleming, T. (1984). <u>Blacks in college: A comparative study of students' success in black and white Institutions</u>. San Francisco: Jossey Bass.
- Freeman, K. (1998). The African American Culture and Heritage in Highter Education Research and Practice. Westport, CT: Praeger.
- Hurtado, S. (1992). The campus racial climate. The Journal of Higher Education, 63, (5), 539–569.
- Howard, R., Woodard, D. B., Kroc, R. J., (1994). National graduation rate study 1994: Report 1. Unpublished manuscript.
- Jackson, K.W., and Swan, L.A. (1991). Institutional and individual factors affecting black undergraduate student performance: Campus race and gender. In W.R. Allen, E.G. Epps, N.Z. Haniff (Eds.), College in Black and White: African American students in predominantly White and historically Black public universities. (pp. 127–142). New York: SUNY Press.
- Jencks, C., and Reisman, D. (1968). The academic revolution. Garden City, NY: Doubleday.
- Johnson, C.S. (1969). The negro college graduate. College Park, MD: McGrath Publishing.
- Kroc, R. J., Woodard, D. B., Howard, R., and Hull, P. S. (1995). <u>Predicting graduation rates:</u> A study of public land grants, research I, and AAU universities. Boston: Association for Institutional Research Forum.
- Kroc, R. J., Howard, R., Hull, P. S., and Woodard, D. B. (1997). <u>Graduation rates: Do student's academic program choices make a difference?</u> Orlando: Association for Institutional Research Forum, Orlando.

- Kuh, G. D., Hall, J. E. (1993). Using cultural perspectives in student affairs. In G.D. Kuh, (Ed.), <u>Cultural perspectives in student affairs work</u>, (pp. 1-20). Lanham, MD: Association of College Personnel Administrators.
- Lang, M., Ford, C. A. (1988). <u>Black student retention</u>. Springfield, IL: Charles C. Thomas.
- Levin, M. E., and Levin, M. E. (1991). A critical examination of academic retention programs for at-risk minority college students. <u>Journal of College Students</u> Development, 32, 323–334.
- Love, P.G., Jacobs, B. A., Boshini, M. J., Hardy, C. M., & Kuh, G. D., (1993). Student Culture. In Kuh, G. D., Ed., <u>Cultural perspectives in student affairs</u> work. (pp. 59–80). Lanham, MD: Association of College Personnel Administrators.
- Love, P. G., Kuh, G. D., MacKay, K. A., & Hardy, C. M. (1993). Side by side: Faculty and student affairs cultures. In Kuh, G. D., Ed., <u>Cultural perspectives in student affairs work</u>. (pp. 59–80). Lanham, MD: Association of College Personnel Administrators.
- Manning, K. (1993). Properties of institutional culture. In G. D. Kuh, (Ed.), Cultural perspectives in student affairs work, (pp. 21–36). Lanham, MD: Association of College Personnel Administrators.
- Monro, J. U., (1984). The need for Black-controlled research on Black educational problems (a view from the classroom). In A. Garibaldi (Ed.), Black colleges and universities: Challenges for the future. (pp.153-177). New York: Praeger.
- Monroe, J., (1994). <u>Facilitating effective learning and teaching</u>. International conference on School Improvement. Victoria, Australia.
- Murguia, E., Padilla, R. V., and Pavel, M. (1991). Ethnicity and the concept of social integration in Tinto's model of institutional departure. <u>Journal of College Student</u> Development, 32 (5), 433–454.
- National Center for Education Statistics. (1996) Historically Black colleges and universities. 1976 1994. U.S. Department of Education, Washington, D.C.: Government Printing Office.

- Neisler, O.J. (1992). Access and retention strategies in higher education: An introductory overview. In M. Lang, & C. A. Ford (Eds.), Strategies for retaining minority students in higher education, (pp. 3–21). Springfield, IL: Charles C. Thomas.
- Nuss, M. E., (1996). The development of student affairs. In S. R. Komives & D. B. Woodard (Eds.), Student services: A handbook for the profession (pp. 22-42). San Francisco: Jossey-Bass.
- Pascarella, E. T., and Terenzini, P. T. (1991). <u>How college affects students:</u> Findings and insight from twenty years of research. San Francisco: Jossey–Bass.
- Pascarella, E. T. (1980). Student-faculty informal contact and college outcomes. Review of Educational Research, 50, (4), 545–595.
- Pascarella, E., Smart, J., and Stoecker J. (1989). College race and the early status attainment of Black students. Journal of Higher Education, 60, 82–107.
- Pascarella, E. T. (1985). Racial differences in factors associated with bachelor's degree completion: A nine year follow-up. Research in Higher Education, 23 (4), 351-373.
- Pascarella, E. T., and Terenzini, P. T. (1984). Freshman attrition and the residential context. The Review of Higher Education, 7, (2), 111–124.
- Person, D. R., and Christensen, M. C. (1996). Understanding Black student culture and Black student retention. <u>National Association of Student Personnel Administrators Journal</u>, 34 (1), 47–56.
- Person, D.R. (1990). The Black Student Culture of Lafayette College. (Doctoral Dissertation, Columbia University, (1990). <u>Dissertation Abstracts International</u>, 51, 22, 85.
- Pounds, A.W. (1987). Black students' needs on predominantly White campuses. In Wright, D.J., (Ed.), Responding to the needs of today's minority students. San Francisco: Jossey-Bass.
- Prestage, J. L., (1984). The role of Black colleges and universities in graduate education. In A. Garibaldi (Ed.), Black colleges and universities: Challenges for the future. (pp.32-77). New York: Praeger.
- Redd, K. E. (1998). Historically Black colleges and universities: Making a comeback. New Directions for Higher Education, 102, 33–43.

- Roebuck, J. B., and Murty, K. S. (1993). <u>Historically Black colleges and</u> universities: Their place in American higher education. Westport, CT: Praeger.
- Smith, C. J., (1998). <u>Public Problems: The management of urban distress</u>. (pp. 51-77). New York: The Guilford Press.
- Somers, P., Hall, M. M., Cofer, J., Putten, J. V. (2000). The persistence of African American college students: How national data inform a Hopwood-proof retention strategy. In S. T. Gregory (Ed.), <u>The academic achievement of minority students: Perspectives, practices and prescriptions</u>. Lanham, MD: University Press of America.
 - Sowell, T. (1972). Myths and Tragedies. New York: David McKay and Co.
- Tidball, M. E., (1991). Women's colleges and women's career attainments revisited. The Journal of Higher Education, 62, 406-409.
- Tinto, V. (1975). Dropouts from higher education: A theoretical synthesis of recent research. Review of Educational Research, 45, 89–125.
- Tinto, V. (1987). <u>Learning college: Rethinking the causes and cures of student</u> attrition. Chicago: The University of Chicago Press.
- Tierney, W. G., (1992). An anthropological analysis of student participation in college. The Journal of Higher Education, 63, 603-618.
- Thompson, C. J., (1998). Historical origins of change: Implications for African Americans in higher education. In K. Freeman (Ed.), <u>African American culture and</u> heritage in higher education research and practice. (pp. 43-56). Westport, CN: Praeger.
- Van Manaan, J., & Barley, S. R. (1985). Cultural organization: Fragments of a theory. In P. J. Frost, L. F. Moore, M. R. Louis, C. C. Lundberg, C. C., & J. Martin (Eds.), Organizational culture (pp. 31-53). Beverly Hills, CA: Sage.
- Wagoner, V., and Nettles, M. T. (1998). It takes a community to educate students. Change, March/April, 18–24.
- Websters' new world dictionary of the American language. (1999). D. B. Guralink (Ed.), Cleveland, OH: William Collins

Wilkerson, D. W. (1988). The Black collegiate advisement program at Kennesaw college: A comprehensive Black student retention model. In M. Lang, & C. A. Ford (Eds.), Black students retention in higher education, (pp. 35–42). Springfield, IL: Charles C. Thomas.

Wirth, L. (1938). Urbanism as a way of life. American Journal of Sociology, 44, 3-24.

Woodson, C. G. (1933). <u>The Mis-Education of the Negro</u>. Washington D.C.: The Associated Publishers.

Wright, D. J. (1987). Responding to the needs of minority students. San Francisco: Jossey-Bass.