SOCIAL, DEMOGRAPHIC, AND INSTITUTIONAL EFFECTS ON AFRICAN AMERICAN GRADUATION RATES IN U.S. COLLEGES AND UNIVERSITIES

LaQueta L. Wright, B.A., M.A.

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APPROVED:

Rudy Ray Seward, Major Professor
Cynthia Cready, Co-Major Professor
Ron Newsom, Minor Professor
George Yancey, Committee Member
Erma Lawson, Committee Member
Nicole Dash, Chair of the Department of Sociology
Thomas Evenson, Dean of the College of Public Affairs and Community Service
Michael Monticino, Dean of the Robert B. Toulouse School of Graduate Studies
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Improving the retention and graduation of African Americans and other minority groups in higher education is an important but highly politicized issue on college and university campuses. Prior studies emphasize the relationship between minority retention and achievement, cultural diversity, and racial policies and climates at predominantly White colleges and universities in the United States. In response to the need for further research, the effects of institutional actions related to diversity, minority group and African American retention, and social integration initiatives on African American graduation rates were examined for a national sample of United States (U.S.) colleges and universities. From a potential list of 7,018 colleges and universities, 2,233 met the inclusion criteria for the study. But necessary and complete information from national directories and the census could only be found for the final sample of 1,105. After dropping 30 outliers, several multiple regression analyses identified the institutional actions, social, and demographic factors that best predicted graduation rates. Public U.S. colleges and universities located in the Midwest region had lower African American graduation rates than private colleges and universities located in the South. Higher African American graduation rates occurred in colleges and universities with Black cultural centers, higher first-year retention rates, higher women enrollment rates, a higher number of student organizations, and Division III athletic programs. Colleges and universities located in a town had higher African American graduation rates than those located in a city, suburb, or rural area.
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CHAPTER 1
INTRODUCTION

The journey of African Americans in educational systems has been a struggle with individual and structural barriers at all levels blocking progress. These barriers have persistently reduced the chances of academic achievement. Over the past century, the educational performance of African Americans in higher education has steadily improved. Yet, still the overall trend of African American success in higher education is lacking relative to Whites.

During and after desegregation, as African American enrollments increased among students, faculty and college officials concerns about integration and campus environments swelled. Arguments have been made that historically the lack of admission of African Americans to predominantly White colleges and universities (PWCUs) is not reflective of the traditional ideals of the university as a place of tolerance and meritocracy (Feagin, Vera, & Imani, 1996; Benton, 2001; Foster, 2003), Steele (1997) and others (Bernstein, 1994; D’Souza, 1991) have argued that PWCUs are among the most liberal and progressive institutions in the U.S.¹ These arguments have driven diversity initiatives at U.S. colleges and universities from the background to the foreground of the discourse on minority retention and achievement.

According to the U.S. Department of Education’s National Center of Education Statistics (NCES), percentages in adults among all racial/ethnic groups who completed high school and college have increased, and the gap between White and African American adults in terms of high school completions have narrowed (KewalRamani, Gilbertson, Fox, & Provasnik, 2007). In 2004, across all racial/ethnic groups “more women than men received degrees” (KewalRamani et al., p. 116). Furthermore, “this
difference was especially pronounced” for African American females who “received twice as many associate’s, bachelor’s, and master’s degrees as their male counterparts” (p. 116). “From 1990 to 2005, all racial/ethnic groups experienced an increase in the percentage of adults age 25 and over who had completed high school, and the percentages of White, Black, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native adults with bachelor's degrees also increased” (KewalRamani, Gilbertson, Fox, & Provasnik, 2007, p. 121). The following section describes college completion among African Americans during a 40 year period from 1960 to 2000.

**College Completion**

Between 1960 and 2000 African American higher education continued to improve as college completions for African Americans doubled. However, as college completion for African American males and females and White males and females narrowed the gap between African Americans and Whites widened (see Table 1).² In 1960, only 3% of African American males and 3% of African American females completed college compared to 10% of White males and 6% of White females. In 1980 diminutive gains were made as 8% of African American males and 8% of African American females completed college compared to 22% of White males and 14% of White females. Twenty years later the percentage of African American men and women who completed college more than doubled, 16% and 17%, respectively, there remained a considerable gap between them and White men and women (31% and 26%). In 2000 the percentage of African Americans who completed college was comparable to Whites who completed college in 1980.
Table 1

Percentages of Persons 25 Years Old and Over in the U.S. who have Completed College by Year and Race

<table>
<thead>
<tr>
<th>Completing College</th>
<th>1960</th>
<th>1980</th>
<th>2000</th>
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<tr>
<td><strong>Black</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2.8</td>
<td>7.7</td>
<td>16.4</td>
</tr>
<tr>
<td>Female</td>
<td>3.3</td>
<td>8.1</td>
<td>16.7</td>
</tr>
<tr>
<td><strong>White</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>10.3</td>
<td>22.1</td>
<td>30.8</td>
</tr>
<tr>
<td>Female</td>
<td>6.0</td>
<td>14.0</td>
<td>25.6</td>
</tr>
</tbody>
</table>


The college completion rates for African American males and African American females were lower than the percentage of White males age 25 and older who completed college in 1980. For African Americans with four or more years of college, 16% of males and 17% of females completed college. Yet, 31% of White males and 26% of White females completed college. There was a 14.4 point difference in college completion for Black males and White males, and a 9.2 point difference in college completion for Black females and White females.

Interestingly, according to Fonseca and Andrews (1993) African American college attainment appears to differ by region of the country. During 1990 African Americans in the South, a region where they make up the largest proportion of the population (comprising 19% of the total population) had the lowest rate of college degree attainment compared to African Americans in other regions. During that same period, the West, a region where African Americans were least numerous (comprising
5% of the total population), had the highest proportion of African Americans with four or more years of college. In the South and West regions, the proportion of African Americans over 25 with four or more years of college was 10% and 19%, respectively. In the same regions, college completion for Whites over 25 with four or more years of college (though higher) was also lowest in the South and highest in the West, 21% and 24% respectively. Whereas, in the South, there was a 10.7 point difference between African Americans and Whites over 25 with four or more years of college, and in the West there was a 5.8 point difference between African Americans and Whites.

African American Higher Education

African American higher education, with its segregated inception integrated and self segregated present and buoyant, yet questionable future has come a long way from the pre-civil rights era when historically black colleges and universities (HBCUs) bore the sole responsibility of providing postsecondary educational opportunities for Americans of African descent. According to Niemann and Maruyama (2005) “Research on university representation and demographics indicates that changes since affirmative action policies, which were put in place have been modest” (p. 416).

While doors to public U.S. educational institutions are technically open to all, the great disparities in the educational system between Whites and ethnic/racial minorities have been diminished only modestly since President Lyndon Johnson signed Executive Order 11246 in 1965, implementing affirmative action policy. According to enrollment numbers from an almanac issue of the Chronicle of Higher Education (2002), enrollments today are not dramatically different from where they were 20 years ago. Fall 2001 freshmen enrollments included 27% students of color (American Indian, 1.2%; African American, 10.6 %; Asian/Pacific Islander, 7.6%; Mexican American/Chicano/Puerto Rican/Latin, 7.4%), compared with 24% students of color in 1993 and 18% in 1982 (p. 416-17).
Despite enrollments doubling overall between 1960 and 1980, postsecondary enrollments of African Americans at predominantly White colleges and universities (PWCUs) and historically Black colleges and universities (HBCUs) actually declined from the high mark reached in 1979-80 (Lucas, 2006). According to Lucas (2006), during this period the decline of African Americans at PWCUs was the result of high attrition and non-completion rates registered by African American student enrollments. However, “by 1987, for the first time in American history black students were more likely to matriculate at predominantly white institutions than at traditionally black schools” (p. 262). During this period “slightly less than 1 in every 5 black students was enrolled at a black college” (p. 262).

There have also been modest gains in college completion among African Americans. Carey (2008) reported “for 2006 among public and private nonprofit four-year institutions who submitted graduation rate survey data the aggregate six-year institutional graduation rate for HBCUs was 38%, compared to 45% for non HBCUs” (p. 7). According to Pascarella & Terenzini (1991) “while these graduation rates may reflect possible changes between HBCUs and PWCUs, U.S. colleges and universities in graduating African Americans, research, including longitudinal data continue to reflect that African American students are less likely to drop out of college if they are enrolled in HBCUs” (p. 380-81). While on average African Americans at HBCUs (many of whom matriculate from segregated schools with inadequate college preparation) have lower test scores and poorer college preparation than those at PWCUs, there is wide variation in these indicators across the different HBCUs (Bowles & DeCosta, 1971). A few HBCUs “with selective admissions policies like Spellman College in Atlanta and Howard University in Washington D.C., typically graduate two-thirds or more of their black
students” (Carey, 2008, p. 7). Furthermore, in previous studies Allen (1985) and Benton (2001) found at PWCUs African Americans had higher attrition rates, poorer academic performance and were less likely to pursue graduate degrees than Whites.

From a national sample of Black undergraduates drawn from six predominantly White, state-supported universities Allen (1985) examined the structural, interpersonal, and psychological correlates of student outcomes to address questions surrounding accommodations between Black and White students, and aspects of successful Black student adaptation at PWCUs. He measured adaptation by levels of involvement in campus life, academic achievement (e.g. high school and college grade point averages) and future occupational goals. Allen (1985) concluded that contrary to expectations these three success related outcome variables were not significantly intercorrelated. Allen’s findings suggested that the integration of Black students into campus social life was not a necessary pre-condition for academic success.

Contrary to Allen (1985) Benton (2001) and other sociologists (Feagin, Vera, & Imani 1996; Solorzano, Ceja, & Yosso, 2000; Harper & Hurtado, 2007) claimed that several institutional factors and Whites’ (e.g. students, faculty and staff) have assisted in creating an atmosphere where Blacks feel alienated, isolated and marginalized. In a qualitative study on the challenges that Black students faced at predominantly White institutions (PWIs), Benton (2001) concluded that rather than address the cultural, social and academic expectations and educational needs of all students, PWIs catered to individuals who academically met white-created standards for student involvement, social integration and academic achievement. Benton (2001) argued that African American students were culturally, economically and academically incompatible with the PWI model. She suggested that PWIs can play a vital role in contributing to the success
of African Americans by learning from HBCUs. The HBCU model has a formula for success in graduating large numbers of Black students, that if utilized could lead to significant increases in retention and graduation rates of African Americans, as well as reduce the challenges that they face at predominantly White colleges and universities (Benton, 2001). The abundance of research on the college experiences of minority students have yet to probe far enough to address whether administrative interventions such as diversity and minority retention initiatives established to address the challenges that African Americans and other racial minorities face at PWCUs statistically impact retention and achievement. Hence, I focused only on non-HBCUs. This chapter states the problem, purpose and significance of the study, and contains details on general research questions, delimitations and limitations.

Statement of the Problem

Post-secondary college completion rates among African Americans have improved but are lagging in comparison to Whites and other race and ethnic minority groups. It is assumed that the different levels of achievement were reflected in graduation rates. In a three-year study funded by the U.S. Department of Education and the Office of Educational Research and Improvement (OERI), Richardson & Skinner (1991) examined state policy environments and organizational practices related to positive outcomes for diversity and student achievement at 10 historically White colleges and universities. In particular they searched for factors found to be effective in helping African Americans, Hispanics and American Indians overcome the barriers that cause high attrition rates. Richardson and Skinner (1991) concluded that “graduation rates for African Americans are low at many selective institutions because admission
requirements and recruiting strategies have increased student diversity without compensatory changes in the environments provided for student achievement” (p. 40). In an attempt to increase race and ethnic diversity, promote multiculturalism and raise cultural awareness on campus several PWCUs have implemented various types of diversity initiatives and minority retention programs.

*Diversity Initiatives in Higher Education*

In the last four decades, diversity in higher education has undergone many transformations. Studying 14 diverse four-year U.S. colleges and universities, including variations in size, control and geographic location, Levine (1993) examined diversity in academic and campus life. Levine (1993) found that diverse populations are highly underrepresented in the student bodies and on their faculties, senior staffs, and boards of trustees. Racial minority populations were underrepresented and the curriculum largely peripheralized or neglected diversity. Furthermore, the co-curriculum, rich in diversity programs, but lacking in intellectual depth was unconnected with the academic side of higher education and largely ignored by the faculty. Several studies have noted the affects of these institutional factors on African American student retention and achievement (Feagin, Vera, & Imani, 1996; Lang, 1992; Richardson & Skinner, 1991).

*African Americans at Predominantly White Colleges and Universities*

In a widely cited study on Black students at predominantly White colleges and universities Feagin, Vera, & Imani (1996) stated that compared to White students, a substantially lower percentage of Black students complete their degrees at four-year institutions. Feagin et al. (1996) claimed that these “statistics cannot be explained
adequately by resorting only to such factors as preparedness for college, student’s family backgrounds, or personal values and attitudes” (p. x). Previous studies (Temp, 1971; Nettles, Thoeny, & Gosman, 1986; Fleming & Garcia, 1998; Tinto, 1992) have focused on the effects of cognitive factors such as college preparation and standardized tests scores on African American retention and achievement. Yet, Feagin et al. (1996) emphasized the impact of noncognitive factors, specifically, campus environments. The dissertation research attempted to examine the effect of these other factors, such as institutional attributes of U.S. colleges and universities.

Statement of Purpose

The primary purpose of this study was to investigate whether diversity initiatives and minority student retention programs such as minority student enrollment, diversity positions and African American community helped explain graduation. To frame the analysis, Tinto’s 1987 model of college/university dropout was used. This model places institutional action such as diversity initiatives and minority student retention programs in the wider context of institutional experiences, including mainstream and subcommunities to examine its impact on graduation. These specific manifestations of institutional action in U.S. colleges and universities were assessed to see how they affect African American graduation rates.

Significance of the Study

This study is significant for three reasons. First, the study addressed an existing gap in the research literature by investigating the relationship between African American graduation rates and social, demographic and institutional action traits in U.S. colleges
and universities. Previous research emphasized the effects of personal (Allen, Epps, Haniff, & Cross, 1992; Ogbu, 2003; Willie & Cunnigen, 1981) or cognitive factors (Pinel, Warner, & Chua, 2005; Hedges & Nowell, 1999; Nettles, Thoeny, & Gosman, 1986; Astin, 1982) on minority and African American achievement. In contrast this study emphasized socio-structural explanations for African American achievement. Second, the study put forward a case for including an additional dimension, *institutional attributes* in Tinto’s longitudinal model of leaving college/university. Tinto’s model used individual traits to observe institutional experiences. Yet, no specific organizational or institutional traits are directly examined in the model. The study used institutional action traits such as diversity and minority retention initiatives in U.S. colleges and universities to examine African American graduation rates. Third, this study should contribute to future research on achievement and the combined effects of personal (e.g. individual) and institutional (e.g. organization) factors among African Americans and other minorities. The question most important to the study was to what degree do diversity initiatives such as institutional interventions established to improve campus diversity and minority student retention (e.g. offices of affirmative action and minority student services) effect African American college/university graduation rates?

**General Research Question**

All else equal, do diversity and minority group retention initiatives and levels of African American retention/social integration have statistically significant effects on African American graduation rates in predominantly White four year degree granting U.S. colleges/universities?
Delimitations and Limitations

**Delimitations**

In previous research, achievement is often measured by cognitive traits such as high school rankings, grade point averages and standardized test scores. For this study the scope of achievement was delimited to African American graduation rates. Cases were delimited to bachelor degree granting U.S. colleges and universities.

**Limitations**

Major limitations for the study are listed below.

(a) This study investigated general attributes of operational strategies, institutional structures or administrative practices of diversity initiatives, and minority retention programs for the colleges and universities included in the population. More specific aspects were not available in the data set used.

(b) Data were not available to distinguish between the attributes of productive and nonproductive diversity initiatives and minority retention programs.

(c) The data set included data on diversity, minority retention, African American populations and organizations, including administrative positions such as Dean or Director of diversity, minority students or multicultural affairs, but did not include data on the goals, responsibilities or quality of those positions or programs. As a result of this limitation four different data sources were needed to collect data for the study: 2009 National Center for Educational Statistics [NCES]; 2007 Princeton Review’s Complete Book of Colleges; 2008 Higher Education Directory; and 2008 College Board College Handbook.

(d) Similarly, data were not available to assess the degree of institutional commitment to diversity and African American student retention and graduation. For example, for the colleges and universities in the population an administrative position of dean or director of diversity was observed as a case that demonstrated a commitment to diversity, minority/African American retention and graduation. Data on the different degrees of commitment behind an administrative position were not available to measure.
(e) The study did not distinguish between diversity initiatives and minority student programs that were institution-specific from those that were more generally essential. Initiatives and programs that are institution specific address specific diversity and minority student concerns for specific minority populations at a specific college or university. Initiatives and programs that are generally essential consist of any diversity, affirmative action/equal opportunity, or minority (e.g. African American, Hispanic American, Native American or Asian American) position, office, program or organization at a college or university.

(f) Data were not gathered for two year community or junior colleges. Hence the study did not examine differences between two-year and four-year higher education institutions on African American graduation rates (Pascarella & Terenzini, 1991). The most recent national survey data available indicated that from 2000-2001, community colleges enrolled about 42% of the African American student matriculants in higher education (Harvey, Harvey, & King, 2004, p. 332). However, results of the study are not generalizable to two year community or junior colleges.

(g) The study did not examine the effects of cognitive factors in higher education institutions on African American graduation rates.

(h) Colleges and universities not listed in all three of the supplemental (non-NCES) directories were not included in the study. The directories included only the colleges and universities that submitted the demographic information requested for their institution. Not all bachelor degree granting U.S. colleges and universities submitted complete information to each of the directories. Furthermore, some institutions were not listed in all three directories.

(i) Data collected for this study were cross-sectional rather than longitudinal. The data were comprised of African American graduation rates for each of the 1,075 colleges and universities in the U.S. for the year 2005 rather than over time.

Summary

The introduction chapter stated the problem, outlined the purpose of the study, and details on graduation rates, significance of study, general research question, delimitations and limitations. The definition of terms is located in Appendix A. The next chapter presents a brief review of the related literature and theoretical framework for the study.
CHAPTER 2
REVIEW OF RELATED LITERATURE

This chapter is divided into two parts. The first part of the chapter presents a review of the related literature on cognitive and noncognitive explanations for African American achievement, including diversity initiatives, minority student retention and African American participation at predominantly White colleges and universities (PWCUs), and historically Black colleges and universities (HBCUs). The second part of the chapter presents the theoretical framework for the study, including discussions on mesosociology, classical sociology and race, and Du Bois and African Americans. The chapter concludes with Tinto’s theory of leaving college/university and its adaption for framing the dissertation analysis.

Chapter 1 discussed how post-secondary rates among African Americans have improved, but are lagging in comparison to Whites and other race and ethnic minority groups. Chapter 1 mentioned how throughout the 1990s the national college dropout rate for African Americans was 20% to 25% higher than that of whites (Perry, Steele & Hilliard, 2003). For 2003-2004 the National Center for the Education Statistics reported that the number and percentage distribution of bachelor degrees conferred by degree granting institutions was over 1.4 million. Over 73% (1,026,114) of those degrees were conferred to Whites compared to a little over 9% (131,241) to African Americans. Low retention and graduation rates among African Americans have led to a broad range of qualitative and quantitative research on the effects of cognitive and noncognitive factors on their collegiate achievement.
There have been three relatively recent reviews of the empirical research on African American student experiences and achievement at PWCUs (Pascarella & Terenzini, 1991; Sedlacek, 1987; Willie & Cunnigen, 1981). The earliest, conducted by Willie and Cunnigen (1981), concentrated on research conducted after the 1964 Civil Rights Act that focused on “exploring black student participation in higher education” (p. 179). Their review contrasted studies of African American students at PWCUs with those of African Americans at HBCUs. They found that much of the research conducted at the time of their review had been from a non-sociological perspective (e.g., Gurin & Epps, 1966; Gurin, 1970; Hartnet, 1970; Campbell, 1969). According to Willie and Cunnigen (1981) the contributions of the major sociology journals such as the American Sociological Review, American Journal of Sociology, Social Forces, Social Problems and the Journal of Educational Sociology were relatively small; they also found that the research on Blacks at HBCUs and PWCUs was mostly descriptive in nature. (p. 180)

Willie and Cunnigen (1981) found that the two different streams of research focused on different variables. The literature on African American students in Black colleges and universities focused on the effects of students’ socioeconomic background and their high school preparation on their college performance. Data on the effects of their on-campus experiences were scarce. In contrast, research on African American students at PWCUs emphasized Blacks’ overall social adaptation to the campus environment, including: “experiences with significant others in the learning environment, the reactions of white students, teachers, and administrators to the presence of black students, and [the African American students’] various strategies of adaptation” (p. 186).
However, African American student achievements, including grades, retention, and graduation were often attributed to family influences and on-campus racial climate rather than formal campus support systems.

A second review by Sedlacek (1987) examined the student affairs research on African American undergraduates at predominantly White institutions (PWIs) from the 1960s to the 1980s. His review focused on variables that correlated with achievement. The points raised were unique to Blacks. Sedlacek (1987) concluded that Blacks continued to have difficulties with self-concept, racism, building community and other noncognitive variables related to their success. According to Sedlacek (1987) “White students may have had self-concept problems, but these did not include the alienating effects of racism” (p. 544). Furthermore, “past and modern day racism has caused African Americans to be excluded from being full participants in many of the White-oriented communities that have developed in the U.S. and in the educational system” (p. 542). Sedlacek (1987) claimed that “as a part of a viable support system, Blacks need to have identification with and be active in a community. The community may be on or off campus, large or small but will be commonly based on race or culture” (p. 542).

Most recently, Pascarella and Terenzini (1991) presented a comprehensive review of all the research on how all U.S. colleges and universities (both PWCUUs and HBCUs) affect all students (including African Americans) on a wide variety of outcomes. They found that a “strong case had been made by Fleming (1984); Nettles, Thoeny, & Gosman (1986); and Willie & Cunnigen (1981) that black students who attend predominantly black institutions benefit from a supportive social, cultural, and racial environment that enhances their successful adaptation to the academic demands of undergraduate life” (p. 382). While Pascarella and Terenzini (1991) noted that “there is
some evidence in the literature of a positive HBCU effect on African American student graduation, the reasons for this effect are not clear” (p. 457).

Cognitive and Noncognitive Factors

Cognitive Factors

Some cognitive-focused studies of African American student experiences in higher education have emphasized student perceptions (Centra, 1970; Taylor & Olswang, 1997). Others have focused on standardized test scores and the Black-White achievement gap (Temp, 1971; Fleming & Garcia, 1998; Nettles, Thoeny, & Gosman, 1986).

Student Perceptions

In a classic multi-campus study of 83 traditionally white institutions, Centra (1970) found that racial differences in student perceptions pointed towards the existence of a dual environment, Centra (1970) administered the Questionnaire on Student and College Characteristics (QSCC) to 249 students to explore the college experiences of Blacks and Whites at these traditionally White U.S. colleges and universities. While they found similar perceptions among Black and White students on involvement in extracurricular activities, goals in attending college, and general features of the college environment, they also found Black students were very aware of their minority status in these institutions and perceived them as places where race or background determined friendships and associations. Furthermore, discrimination by fraternities, sororities and social clubs, as well as the small number of African American student enrollments, were perceived by Blacks as contributing to their minimal
involvement in on-campus dating and social life. Interestingly, however, unlike Whites, Black students felt they were involved in most of the student protests on campus and in those extracurricular programs that promoted civil rights and improvement of campus life.

Taylor and Olswang (1997) claimed that “as predominantly White institutions have increased their enrollment of African Americans and attempted to improve graduation rates, assessing their efforts are complex, possibly because of the dynamic interplay between individual and institutional characteristics” (p. 12). Surveying 234 African Americans at a large predominantly White public research university of 24,000 undergraduates Taylor and Olswang (1997) examined the effects of their individual characteristics on their perceptions of the campus environment. Like the Centra study above, the Taylor and Olswang study documented a racialized perception of the campus on the part of African American students at PWCUs. Specifically, they found that 62% of the African American students felt that activities on campus reflected their interest, but at the same time 59% did not participate in student organizations, and 56% did not feel that they were part of campus life. Furthermore, “while 70% of the students reported being happy with their decision to attend the university, only 35% reported a sense of commitment to the institution” (Ebscohost, 2007, p. 3). In fact, many students decried the lack of appreciation and awareness of their culture in the formal organization and curriculum of their college or university: “Over half of students (53.3%) felt that insufficient attention was given to the needs of African American students. In response to the statement, my culture is accurately reflected in the curriculum, 67.4% disagreed. Requests for an Ethnic Studies requirement were frequent; students felt that race relations would benefit” (Ebscohost, 2007, p.3).
Standardized Tests and the Achievement Gap

Other studies on the effect of cognitive factors on college performance emphasized standardized test scores and the achievement gap (Temp, 1971; Fleming & Garcia, 1984; Nettles, Thoeny, & Gosman, 1986). Compared to Whites, there can be no question but that the educational performance of African American students is, in general far below their potential (Perry, Steele, & Hilliard, 2003). Perry et al. (2003) claimed that variations in achievement should not be thought of as the gap between Black and White students rather as the gap between the current performance of African American student levels and levels of excellence. Perry et al. (2003) argued that the research on the achievement gap between Black and White students is based on an ineffective measurement of African American achievement. Despite this argument, researchers, including, Temp (1971) and Fleming & Garcia (1984), have examined the achievement gap in college performance between Blacks and Whites, using cognitive factors, such as standardized tests and student grades.

For example, Temp (1971) investigated the validity of using Scholastic Aptitude Test (SAT) scores to predict the grade point averages (GPAs) of Black and White students in thirteen PWCU at the end of their first year in college. He found that in most of the PWCU the effect of SAT score on freshmen GPA tended to differ by race. Specifically, he found that if the prediction of freshman GPA from SAT scores is based upon the regression equation for White students in an institution, then the predicted GPA for Black students, as a group, will tend to be higher than it actually is. Nearly 15 years later, Fleming and Garcia (1984) examined whether the effect of SAT score on academic performance for African Americans tended to differ by the racial composition of their institution—by whether they were at a PWCU or an HBCU. The researchers
found a small difference; SAT scores were slightly less predictive of African American performance at PWCUs. The findings from these two studies, together, suggest that SAT score, alone, is not a sufficient predictor of African American academic performance at PWCUs.

**Noncognitive Factors**

Research on noncognitive explanations for African American retention and achievement emphasized family background and socio-economic status (Ogbu, 1990; Seidman, 2005). These studies also included campus environments and racism (Gibbs, 1977; Nettles, Thoeny, & Gosman, 1986; Sedlacek, 1987; Feagin, Vera, & Imani, 1996; Pinel, Warner, & Chua, 2005; Spears, 1978).

**Family Background and Socioeconomic Status**

Ogbu’s (1990) case study on achievement among affluent African Americans in a suburban school district in Ohio is one of the most cited and critiqued studies on the affects of family background. Ogbu (1990) concluded that “from elementary to high school the educational strategies of the African American student involved a lack of commitment to academic engagement, including studying; doing homework and paying attention in class” (p. 260). Furthermore, he states “parents were equally disengaged and did not consistently and systematically supervise their children’s homework closely; teach them the appropriate use of their time; shield them enough from negative peer pressure and use effective methods for motivating children to engage in their schoolwork” (p. 261).

Findings from Seidman’s (2005) recent review of successful minority retention
programs also cite family background as an important factor. He found that African American students were often from lower-income groups, among the first generation to go to college and from single-parent homes. Furthermore, Seidman (2005) concluded that “for both male and female African American students, lack of parental support and limited resources negatively affect their enrollment and retention” (p. 16). There was a correlation between African Americans from lower-socioeconomic backgrounds and students’ lesser ability to pay for their education and stay in college.

Campus Environments and Racism

By the late 1970s and 1980s, the effects of campus environments including racism emerged in the research literature. In a study of students at 30 PWCUs, Nettles, Thoeny, and Gosman (1986) found that the Black student GPA at these institutions was in part affected by the student-campus fit, as measured by such factors as his or her “feelings that the university is nondiscriminatory” (p. 258). Spears (1978); Sedlacek (1987); Feagin, Vera, & Imani (1996); and, Pinel, Warner, & Chua (2005) argue that hostile campus environments, racism and group stigma negatively impact African American retention and achievement. According to Spears (1978), institutionalized racism in American society is the major factor affecting the unsatisfactory performance of African Americans. Spears (1978) claims that while research on African American achievement has identified linguistic and cultural difference factors, it has failed to identify institutionalized racism.

persuasive evidence that identification with an institution was a more important correlate of retention for Blacks than for other students” (p. 539). Furthermore, the findings of this research indicated a relationship between the way African American students feel about themselves and their on-campus adjustment and success.

Perry et al. (2003) define stereotype threat as the “threat of being viewed through the lens of a negative stereotype or the fear of doing something that would inadvertently confirm that stereotype” (p. 112).8 They suggest that achievement among African Americans may depend less on expectations and motivations and more on the limiting effects of negative stereotypes about their racial group. Indeed, Pinel, Warner and Chua (2005) found that attending a predominantly White college increased the stigma consciousness levels of students belonging to academically stigmatized racial/ethnic minority groups including African Americans. They also found that increased stigma consciousness was associated with lower GPA and more disengagement among males and lower self-esteem among females. In addition, according to Seidman (2005), racial minorities tend to have an additional encumbrance of being seen as representing all members of their particular race and culture. This “added burden on minority students interferes with their institutional acculturation and academic purpose”, as many of them do not want to be considered their races’ and cultures’ representative to the college community. (p. 19) In sum, at PWCUs African Americans are faced with a variety of negative experiences (Gibbs, 1977; Willie & Cunnigen, 1981; Sedlacek, 1987; Hurtado, 1992; Williamson, 2000; Solorzano, Ceja, & Yosso, 2000; Harper & Hurtado, 2007). Thus, rather than function as agents of social integration, U.S. colleges and universities often function as agencies of segregation and alienation. Shingles (1979) in his study on College as a Source of Alienation noted that
“African American students are alienated from White society or even from their own race. Furthermore, dissatisfaction with the institution contributes to Blacks' alienation from White society by enhancing these students' sense of powerlessness, militancy, and separatism” (p. 283).

Minority and African American Achievement

At HBCUs the success of African American student retention is attributed to several factors, including a predominantly African American environment of students, faculty and administrators. On PWCUs the success of African American retention and graduation is attributed to several factors including preparation, family background, financial resources, social networks, faculty-student interactions, involvement opportunities and African American subcultures (Foster, 2003; Pascarella & Terenzini, 1991; Tinto, 1993).

Lang (1992) and Richardson and Skinner (1991) argue for additional institutional factors, such as student preparation, state interventions, diversity programs and research to impact minority and African American achievement. Consider federal financial aid, for example. African American families tend to earn significantly less than White families resulting in fewer family resources available to provide their students exposure to college preparation experiences and to help pay for increasing tuition expenses. During the early 1960s the Kennedy administration initiated significant programs that provided federal financial aid for minority students to pursue higher education (Lang, 1992). Those programs led to the increases in enrollment among low-income and minority students at colleges and universities. However, enrollments changed dramatically during the 1980s. During the Reagan administration “substantial
reallocations were made in federal student aid programs, with a significant impact because most minority college students depend on some form of financial aid” (Lang, 1992, p. 516). Decreases in federal support for minority student financial aid programs further hurt minority student access and retention.

In an in-depth evaluation of success in improving minority achievement on 10 PWCUs, Richardson and Skinner (1991) concluded that African American achievement in particular on these campuses are most likely improved by one of three, or a combination of three factors. First, some institutions are successfully graduating African American students because they attract well-prepared students, who with fairly limited assistance overcome gaps in academic preparation and feelings of marginality and cultural isolation. Second, among a few institutions, African American achievement outcomes are better explained by strong state and system interventions rather than institutional practices or administrative commitments. Third, institutional diversity patterns that affect African American graduation rates require a change in organizational culture. To prevent African American graduation rates from declining, interventions to increase diversity must be balanced with interventions to maintain or improve achievement.

More recently, Yancey (2008) examined reasons why African Americans, Hispanics and American Indians may be less committed to degree completion and integrated into the college/university. Yancey collected data from the National Center for Educational Statistics and the 2007 Princeton Review’s Complete Book of Colleges on 853 U.S. colleges and universities. He used regression analysis and theories of availability, social/demographic similarity, and in-group proximity to examine the effects of institutional factors in U.S. colleges and universities on minority graduation rates.
Yancey (2008) reports theories of availability suggest “that the financial availability and academic rigor of educational institutions [affects] the ability of students to remain committed to the goal of degree completion” (p. 7). Theories of demographic and social similarity stress the importance of demographic and social traits unique to African Americans and other racial minorities, such as region (e.g. of historically being geographically concentrated in the South for Blacks), on retaining and graduating members of racial minority groups. Theories of in-group proximity posit that the higher the relative share of racial/ethnic in-group members in close proximity, including on campus, such as the percentage of African American residents living in the city where the college/university is located, and the percentage African American students, respectively, the higher the graduation rate for the racial/ethnic group tends to be.

Yancey’s (2008) findings failed to support any of these theories. He concludes the institutional level reasons why disadvantaged racial minority students “graduate from certain educational institutions [are] the same reasons why majority group students graduate” (p. 1). The identification of these in-common reasons, however, was beyond the scope of Yancey’s study. In addition, apart from examining in-group proximity and how a critical mass of racial minority group populations impacts minority retention and graduation Yancey’s research did not examine the effects of specific types of diversity or minority retention initiatives. Since past social, political and economic barriers, including those at the college/university or institutional level have contributed to blocking African American participation in education at every level, the following sections discuss the history of African American participation and diversity in higher education.
A History of African American Participation in Higher Education

In the early research on African American higher education achievement and participation were synonymous. Studies on African American achievement emphasized African American enrollments at HBCUs and PWCUs (Johnson, 1959; Centra. 1970; Thompson, 1973; Willie & Cunnigen, 1981). Prior to 1948 only two state universities and a handful of Christian-supported institutions had admitted Negro students (Johnson 1959). According to Johnson (1959), “by 1959 nearly half of all public institutions in the South and half of all institutions in the nation were desegregated” (p. 254).

In the late 1800s the system of private Negro colleges emerged as a means to circumvent the exclusion of African Americans from private and state colleges in the South (Aguirre & Turner, 1998). After the Civil War, “The Freedman Bureau, set up by an Act of Congress in 1865 and administered by the War Department, gave protection and assistance to several church bodies—led by the American Missionary Association—which established schools for Blacks throughout the South” (Thompson, 1973, p. 10). Some of the schools started by church bodies developed into the first institutions of higher education available to Black youth in the South (Thompson, 1973). In one of the first multi-campus studies on desegregation Guy Johnson (1959) found that Negro enrollments among integrated institutions were quite small; that is, the Negro enrollment rarely exceeded 1% or 2% of the total enrollment.

In his book Private Black Colleges at the Crossroads Daniel Thompson (1973) claimed:

During their first century, Black colleges, with little or no cooperation from White colleges, trained Black teachers who were able to reverse the rate of literacy among African Americans from five percent literate to only five percent illiterate. In 1860 between three to five percent of the adult Black population was literate; by 1900 the rate of literacy had increased to about 55%; by 1920 it was nearly
77%, and by the 1970s only five percent of the adult Black population was classified as illiterate. (p. 10-12)

Christopher Lucas (2006) in his book *American Higher Education: A History* found that from 1899 to 1900 an estimated 475 Black students were awarded degrees from HBCUs. According to Lucas (2006) “these new graduates, added to a pool of about 3,000 who had previously graduated (almost all of them from small unaccredited black colleges), represented an infinitesimally small fraction of a total black population of 10 million” (p. 215). Furthermore, Lucas (2006) claimed, that “by the mid-1930s, the number of black students attending college had grown to 19,000, the vast majority of whom were now enrolled in public black colleges, fewer in private black colleges, and only a very small percentage attending predominantly white institutions” (p. 216).

After World War II, Black enrollments in southern White institutions increased and HBCUs began to compete with PWCUs for Black student enrollments (Lucas, 2006). After desegregation the racial composition of PWCUs changed as small numbers of Blacks began to matriculate on campus (Willie & Cunnigen, 1981). From 1940 to 1950, Black enrollments at PWCUs outside the South grew to 61,000, which was 3% of the total enrollment in those colleges and about 47% of all Black enrollments (Lucas, 2006). According to Lucas (2006), “between 1965 and 1970 black enrollment in white institutions more than tripled; Simultaneously, Black enrollments in HBCUs had dropped from 82% of all college attending blacks to 60% between 1965 and 1970; it declined to 40% by 1978” (p. 262).

According to Willie and Cunnigen (1981) “by 1978, 10.6% of all persons enrolled in higher education in the U.S. were black” (p. 186). Yet, by the late 1980s, “for the first time in American history, black students were more likely to matriculate at
predominantly white institutions than at traditionally black schools” (Lucas, 2006, p. 262). Furthermore, “slightly less than one in every five black students was then enrolled at a black college” (p. 262). As a higher number of African Americans were enrolled at PWCUs their enrollment numbers as percentages of the African American age-cohort 18 to 21 continued to lag well behind the percentage of whites attending college (Lucas, 2006). The next section discusses the emergence and changes in diversity at PWCUs.

Diversity in Higher Education

As mentioned briefly in Chapter 1, diversity in higher education has undergone many transformations over the last four decades. Various types of diversity initiatives and minority retention programs have been implemented. Studying 14 four-year U.S. colleges and universities, varied in size, control, and geographic location, Levine (1993) noted a lack of diversity on these campuses and their administrations as well as in their academic- and co-curriculums. (p. 333) According to Levine (1993), from one decade to the next the characterization of diversity has undergone the following transformations. During the early 1960s the focus of diversity was on representation in or admissions to college. In the 1970s institutions shifted their focus to retention by providing minority populations support to stay in college. Diversity as racial integration was a product of the late 1970s and the early 1980s. During this period the focus was on incorporating historically underrepresented and segregated groups into the larger campus population. For the twenty first century the characterization of diversity has been multiculturalism. The aim of multiculturalism is to legitimize both the intellectual and the emotional aspects of diverse cultures in the academic curriculum and campus life through teaching, research and service. Interestingly, in Levine’s (1993) assessment: “no
Nevertheless, on-campus diversity has had some significant effects on students. For example, in a longitudinal study of 4,403 college students attending nine public universities, Hurtado (2005) examined diversity and intergroup relations research and found that student interactions with diverse peers during college resulted in changes in student cognitive, social, and democratic outcomes by the second year of college. Affirmative action is probably the most widely recognized practice and policy for implementing diversity.

Affirmative Action

Affirmative action policies are designed to address institutional practices and past and present discrimination. Since the 1960s, many colleges and universities have implemented affirmative action programs to increase minority student enrollment, redress the discriminatory practices of the past, and make the student body more of a reflection of the diverse communities that exists in society (Healey 2009). Healey (2009) argued that “one of the prominent battlegrounds for affirmative action programs has been higher education” (p. 233). Yet, faculty, staff, and students on campus may not support affirmative action policies as conduits for increasing diversity and equity on campus. According to Niemann and Maruyama (2005), with or without affirmative action policies, “it is imperative to the social and economic future of the United States that educators develop and or adopt policies that will provide realistic higher educational opportunities for students of all race/ethnicities in selective and nonselective institutions” (p. 408).
Alon and Tienda (2005) argued that affirmative action practices both broaden educational opportunities for minority students as well as enable them to realize their full potential. Rejecting the mismatch hypothesis, that minority students with lower credentials than the institutional average were mismatched at selective institutions and thus had worse outcomes. Alon and Tienda (2005) found that minority students thrived at selective postsecondary institutions despite their disadvantaged starting positions. Knight and Hebl (2005) studied student reactions to affirmative action plans and found that justifying an affirmative action plan through emphasizing the advantages that diversity brings to the campus had a positive impact on non-minority students’ support for the program.

Varying positions have been taken by U.S. colleges and universities on state and national government affirmative action policies to increase diversity and minority student opportunities on campus. These arrangements are seen as unfairly benefiting African Americans and other racial minorities on campus. The current lack of campus-wide understanding among faculty, staff, and students of the need to increase minority enrollment, have diverse student organizations and programs, and support diversity policies on campus is reflective of the ongoing backlash against and conflicting interests over affirmative action. According to Bobo (2000) the rejection of affirmative action policies is one of the effects of symbolic racism. Symbolic racism is a new form of anti-Black racism elicited among Whites “when political leaders or discourse invokes issues or labels that call to mind Blacks” (p. 140). Bobo (2000) noted that affirmative action is one of many racialized issues in which Whites respond in terms of an “underlying psychological animus against African Americans” (p.140). Policy or program initiatives at U.S. colleges and universities perceived as being associated with African Americans
and other racial minorities are often labeled as *affirmative action* and unfair. These initiatives are seen as benefiting African Americans even when no institutional commitment to their retention or achievement exists.

According to Levine (1993) no group on campus is doing more to assist the university in achieving its affirmative action plans and no administration is doing more to turn the rhetoric of diversity into reality than student affairs professionals and departments. Student affairs administrators, rather than executive officers and division deans, often end up being the defenders of the institution's diversity and affirmative action policies. The following section discusses diversity initiatives, student affairs and minority retention.

Diversity, Student Affairs, African American Community and Integration

*Diversity*

The level of interest in and commitment to diversity varies dramatically across institutions. College and university leaders struggle with defining diversity goals, creating criteria for diversity initiatives, evaluating diversity programs and identifying effective strategies for implementation. Their struggles may be influenced by their perceptions and attitudes toward diversity. Levine (1993) found that colleges and universities have a tendency to think of diversity as a problem rather than an opportunity to shape the institution's future. Furthermore, rhetoric has tended to outstrip action as three-quarters of colleges and universities lack long-range, systematic planning with regard to diversity.
Student Affairs

United States (U. S.) colleges and universities have delegated the issue of diversity to student affairs administrator, who are often expected to manage multiple aspects of diversity, including the social and academic integration of minority students into campus life and their retention. These responsibilities may also include counseling minority students, advising minority student organizations, facilitating minority leadership and development, coordinating minority activities (e.g. cultural) and retention programs, and mediating various types of minority group (e.g. student, organization, institution) conflict. According to Levine (1993) student affairs administrators “hire staffs including larger numbers of underrepresented populations than the rest of their campuses, develop staff training programs on diversity issues, establish new resident options, add counseling services targeted at underrepresented groups and create an array of cultural activities for the entire campus community” (p. 337).

By delegating the issue of diversity to student affairs, Levine (1993) argued that the administration is creating “a gulf between student affairs and the faculty, who do not understand the work of student affairs and hold it in low esteem” (p. 337). Furthermore, claimed Levine “student affairs departments are being asked to address both the intellectual and the developmental aspects of diversity without the resources and legitimacy to do so” (p. 337). These criticisms, notwithstanding, student affairs has largely been solely tasked with providing academic and social support services to racial and ethnic minorities and African American students. In fact, minority and African American student retention offices, if they exist, are housed in the division of student affairs. These minority and African American student retention offices handle all related
African American Community and Integration

Williamson (2000) and Harvey, Harvey and King (2004) claimed that the sense of marginal inclusion felt by African Americans at U.S. colleges and universities, PWCUs in particular, has not gone unchallenged. According to Williamson (2000), after the 1970s college administrations were restructured to include positions for diversity, affirmative action/equal opportunity, minority student services, race and ethnic studies programs, and cultural centers. The emergence of African American subcultures and community was a direct result of Black students’ response, including demonstrations and protests, to their experiences of prejudice, discrimination and racism by White students, faculty and administrators. Harvey et al. (2004) concluded that “within predominantly White institutions, African American students frequently chose not to participate in racially integrated campus activities, and instead formed African American student unions, joined African American fraternities and sororities, and/or lived in all African American dormitories” (p. 335). Notably, the creation of minority student offices and African American student programs at U.S. colleges and universities contributed to the formation of African American communities on those campuses.

Several studies cite the positive effects of on-campus African American communities on African American student retention and achievement (Richardson & Skinner, 1991; Lang, 1992; Tinto, 1993; Feagin, Vera, & Imani, 1996; Seidman, 2005). African American communities may include offices of minority support services, Black cultural centers, and professional and social organizations, such as the National Pan-
Hellenic (e.g. fraternities and sororities), Association of Black Students (e.g. and or
National Association for the Advancement of Colored People [NAACP]), National
Society of Black Engineers, National Society of Black Journalists, National Society of
Black Accountants, and gospel choirs (Williamson, 2000; Foster, 2003). Members,
organizations, and offices that comprise the African American community emphasize
African American history and achievement, including the contributions of African
American scholars, campus issues, and racial group solidarity and support.

Relatively recently, Foster (2003) concluded “previous explanations of the
formation and maintenance of Black communities on PWCUs, including those of Frazier
(1939); Moynihan (1965); Ogbu (1990); Harrison (1992); and, McWhorter (2000), were
maladaptive to contemporary circumstances” (p.266). Specifically, previous
explanations failed to account for the dynamic nature of cultural norms within African
American student groups and differences in cultural practices across these groups. In
addition, they did not account for the existence of non-Blacks in African American
student communities. Lastly, previous explanations did not acknowledge the community
identity of Black subcultures (Foster, 2003).

Foster (2003) attempts to better understand the social nature of these
communities. His study of the contours of the Black student community includes their
cultural norms, terms for membership, and the dynamic interplay between status and
roles among members within the community. Foster (2003) claimed that “two basic
impulses located within the psyche of individuals—wanting to belong and needing to
establish connections to individuals with similar experiences—result in the creation and
maintenance of the African American student community” (p. 274). That is, “the black
student community exists because it fulfills individual needs” (p. 274). According to
Foster (2003) the Black student community “is a product of a racialized group of students’ similar needs; a response that helps black students survive and develop—if not academically in all cases, than at least emotionally and socially” (p. 274). The community is maintained through status groups and roles held by students within the community, as well as relationships (e.g. individual, student groups, and organizational) with alternative alliances such as African American churches, businesses, and extended families outside the campus community. “But to simply assume the existence of a student sub-community without an understanding of its contours or function(s) in individuals’ lives,” claimed Foster, “is to lose important opportunities, not just to observe and account for social process, but also to positively affect individual educational outcomes” for African American students (p. 280).

While examining the dynamic and complex nature of African American communities is beyond the scope of the dissertation, Foster (2003) and Williamson’s (2000) findings on African American student communities and the elements which comprise them help frame the study. The dissertation examines the impact of various factors on African American graduation rates at PWCUs, including the African American student community and diversity and minority student retention initiatives. The next section presents the theoretical framework and research model for the study.

Theoretical Framework for the Study

This part of the chapter presents a synthesis of the perspectives of Neil Smelser on meso-level research, W.E.B. Du Bois on African Americans and two elements, institutional action and social integration, of Tinto’s model of “leaving college/university” to provide a conceptual and theoretical framework for the study.
Mesosociology

Classical sociologist and race relations theorist, W.E.B. Du Bois (1904) and contemporary sociologist and social movement theorist, Neil Smelser (1997) grasped the importance of the intense study of formal groups, organizations and social movements. Both of these scholars were advocates of meso-level research. Du Bois (1904, 1978) emphasized the need for smaller, minute studies of limited fields of social action where observation and measurement were more readily applicable. Smelser (1997) was concerned with the tendency of groups to dissolve, transform, and reinvent themselves. According to Smelser (1997) “sociological research and practice moves through four successive analytic levels: 1) micro, the analysis of the person and personal interaction; 2) meso, the structural but subsocietal phenomena such as formal groups, organizations, social movements and some aspects of institutions; 3) macro, institutional and societal; and 4) global, multi-societal” (p. 1).

For this study, diversity initiatives, including affirmative action, minority student services, Black cultural centers and student organizations, and African American/Black Studies programs were examined as socio-structural traits in U.S. colleges and universities. The focus on the impact of these traits on African American graduation rates makes it a meso-level analysis. The following sections identify some of the key contributions of classical and contemporary sociologists to the development of research that acknowledges race, in general, and being African American, in particular, as a focal variable.

Classical Sociology and Race

With the exception of research in anthropology and psychology on primitive
cultures and racial identity theory, respectively, early research literature on racial minorities in the social sciences is scarce. Racial formation theorist Howard Winant (2000) claimed the “concept of race was within the works of classical sociologists—Spencer, Marx, Weber and Durkheim, However, it was often used in an inchoate undertheorized, or taken-for-granted form” (p.173). Winant (2000) claimed that “Spencer, preoccupied with the natural characteristics and rankings of groups only hinted at the notion of race and racial superiority. In Capital (1867, 1885 & 1894), Marx admonished the depredation, despoliation and plunder of the non-European world” (p. 173). Yet, rather than directly acknowledge, Marx insinuated the connection between colonialism, exploitation and race. According to Winant (2000) Weber’s acknowledgment of the concept ethnic in his discussion on status was racialist meditation. The implication here is that in his writings on status, prestige and honor Weber addressed the concept of ethnicity (e.g. ethnie), but failed to seriously discuss the implications of race. Rather than examine race, ethnicity and culture, Winant (2000) claimed that “Durkheim’s Eurocentric ranking of the world in categories of “primitive” and civilized peoples was based on limited ethnology and racialist thought” (p. 174).

In contrast to the negligence of these other classical thinkers W.E. B. Du Bois’ research is considered the first major contributor to the race relations dialectic in the U.S. (Himes, 1949; Winant, 2000). His discourse thrust sociology towards a serious inquiry of race. One of Du Bois’ (1899, 1996) most significant works initiating this dialectic was his book, The Philadelphia Negro: A Social Study published at the end of the eighteenth century. It was a little over 50 years before another major contributor to this dialectic emerged, that is, Gordon Allport’s (1954) research and his book, The Nature of Prejudice, published in 1950. W.E.B. Du Bois’ work on race and his studies of
African Americans provides an important foundation for the dissertation study. The examination of the unique experiences of contemporary African Americans at U.S. colleges and universities builds on Du Bois’ argument that African Americans when compared to other racial minority groups in the U.S. are an isolated group.

_W.E. B. Du Bois, Race and African Americans_

In addition to thrusting sociology towards a serious inquiry of race Du Bois’ research pioneered the race relations dialectic that thrust sociology towards a serious inquiry of African Americans relations with and in comparison to other racial groups. During his lifetime, Du Bois, the avid social scientist and activist was preoccupied with _the problem of the color line_ and the study of one racial and ethnic minority group - African Americans. Himes (1949) was one of the first sociologists to point out that Du Bois’ research, published in the United States, was the first serious sociological study of a Black racial group undertaken by an American Black scholar. Himes (1949) noted that Black schools and colleges were not Du Bois’ primary research focus, but were the focus of two of his seven major publications, that is, _The College Bred Negro_ and _The Negro Common School_, published in 1900 and 1901 respectively. They were also identified in his comprehensive series of sociological studies on urban and rural African Americans.

Du Bois argued that African Americans provided the ideal group to study because the researcher was able to engage in a careful and exhaustive analysis from many points of view because of the group’s isolation (Du Bois, 1978). Furthermore, when compared to other race and ethnic groups in the U.S., not only were African Americans an isolated group, they faced a unique burden of an internalized,
marginalized racial identity in addition to a social struggle (Du Bois, 1978). In *The Soul of Black Folks*, Du Bois (1904) first termed the dynamic interplay between the inner identity struggle and outer social turmoil as *double consciousness*.

Building on Du Bois’ work, in *Who is White: Latinos, Asians, and the New Black/Nonblack Divide*, Yancey (2003) examined the ideologies of Whites, Blacks, Asians and Latina/os on racialized issues. He focused in particular on the racial alienation that separates Blacks from Whites and other Nonwhites. Yancey’s (2003) findings suggest that over time Hispanics and Asian Americans will assimilate into the White dominant group and that this group will make the ideological and cultural adjustments to accommodate them. Furthermore, while some Blacks will share the same ideologies as Whites and be accepted in the mainstream, the position of Blacks in the social hierarchy will continue to be perceived by Whites and other groups as representing *the bottom*. That is, just as the White dominant group from northern and western Europe changed its perspective on Catholicism in reaction to the interchange with the former minority groups of southern and eastern Europe, likewise, because of their interaction with Hispanic and Asian Americans, Whites will alter their perspectives to accommodate these two racial groups. (p. 138) He predicted that the racial identities and ideological components separating Hispanic and Asian Americans from Whites will either disappear or grow much weaker. Yet, Whites will not allow the same degree of assimilation to take place for African Americans.

In sum, the effects of race and ethnic identity (Cross, 1971; Helms, 1990a; Helms, 2008), racial group relations (Schaefer, 1993 & 2002; Bobo & Hutchings, 1996; Hurtado, 2005; Rose, 2006; Chang, 2007), and alienation (Shingles, 1979; Feagin,
Vera, & Imani, 1996; Yancey, 2006) are important considerations when focusing on African American retention and graduation patterns.

*Model of Leaving College/University*

Tinto’s (1993) model of leaving college/university defines institutional departure as “the ways in which the social and intellectual communities that make up a college come to influence the willingness of students to stay at that college” (p. 104). Institutional departure consists of the social and academic processes that lead to attrition at individual colleges and universities. According to Tinto, mainstream programs emphasizing the role of social and intellectual communities, within and outside the classroom, shape the students’ integration into college life and influence retention. The processes by which students become integrated into or members of the mainstream campus community, or into smaller communities within the campus environment, are central to Tinto’s (1993) theory of student departure.

*Theory of Student Departure*

In his second edition of *Leaving College: Rethinking the Cause and Cures of Student Retention* Tinto (1993) expands his research on student attrition and the role of U.S. institutions of higher education. Extending his theory of student departure Tinto argued that for minorities and other student populations, patterns of incongruence and isolation, more than those of academic incompetence, are central to the process of individual student retention. Student departure is defined as the character and causes of the student’s decision to leave.
As Figure 1 shows, Tinto’s theory of student departure includes as explanatory factors student attributes, intentions, including goals and commitments, institutional experiences, and both academic and social integration. Tinto’s model seeks to explain how interactions among diverse individuals within the academic and social systems of the institution, including the communities which comprise them, lead individuals to withdraw from that institution prior to degree completion (Tinto, 1993).

Figure 1. Tinto’s model of institutional departure.

On the one hand, Tinto’s (1993) model makes evident how cognitive “factors of intentions, commitment, adjustment, difficulty, congruence, isolation, obligations, finances and learning all come to affect student departure from the institutions of higher education” (p. 83). On the other hand, the model includes non-cognitive factors, such as the student’s institutional experiences (Figure 1, column 3) and their personal/normative integration (Figure 1, column 4). Included in the student’s institutional experiences are his or her academic performance, interaction with faculty and staff, involvement in extracurricular activities, and interaction with peers. Included in the students’ personal/normative integration are his or her levels of involvement in the academic and
social life of the campus (see Appendix B for details). This study emphasizes these non-cognitive factors.

Student Institutional Experiences and Institutional Action

According to Tinto (1993), “student institutional experiences are affected in part by institutional action. Institutional action is the various types of action institutions take to enhance student retention” (p. 138). For example, looking at the impact of organizational attributes including routinization, value, and development on retention, through their impact on student satisfaction, Bean’s (1980/1983) study on student departure argued that policies that increase students’ participation and enhance the rewards they obtain for their work in the institution would have a positive effect on institutional rates of retention. Tinto (1993) claimed that the “strength of the organizational view of student departure lies in its reminding us that the organization of educational institutions, their formal structures, resources, and patterns of association, does impact on student retention” (p. 89). Furthermore, “these models should also be appealing to researchers interested in the comparative analysis of institutional retention, since they enable us to highlight how different organizational are related to different retention outcomes among relatively similar student bodies” (p. 89-90). Yet, Tinto (1993) also argued that the weakness of these models is that they “do not point out the intervening factors, such as student subcultures and patterns of student-faculty interaction that serve to transmit the effect of the organization to student behaviors” (p. 90).

Tinto (1993) argued that effective institutional action, resulting in personal/normative integration, occurs when established social and academic retention
programs provide opportunities for students to become members within one of the many communities on campus and the community at large. According to Tinto (1993), effective retention programs: “(1) put the students’ welfare ahead of other institutional goals; (2) are committed to the education of all rather than some students; and 3) are committed to the development of supportive social and educational communities in which all students are integrated as members” (pp. 146-47). These types of communities involve interactions between students, faculty and staff that are rewarding and occur in a variety of settings. He suggested that membership in smaller communities is especially important for African American retention and achievement.

Personal/Normative Integration and Community

Both anthropologist Van Gennep’s (1960) stages of rites of passage in tribal societies and sociologist Durkheim’s (1897/1951) study of suicide provided the conceptual framework for Tinto’s thinking about institutional departure from higher education, especially the dimensions of personal/normative integration and community. Van Gennep’s three stages of association—separation, transition and incorporation were used by Tinto (1993) to isolate the interactional roots of the early stages of student withdrawal from institutions of higher education. Similarly, Tinto (1993) argued that there were three phases of association between the student and other members of the institution. Separation involved the process of the student moving away from home and into the college campus community. Transition entailed identifying and establishing social networks necessary for functioning within the new environment. Lastly, incorporation involved becoming integrated into the campus community through the
academic, social, residential or political mainstream or one of the smaller communities or subcultures.

Durkheim’s (1897/1951) investigation of the social concomitants of suicide was used by Tinto (1993) to understand the relationship between departure and social integration. Examining variations in the suicide rates, Durkheim (1897/1951) identified the social environments in which four types of suicides occurred — egoistic, altruistic, anomic and fatalistic. Durkheim (1897/1951) defined the state in which the individual ego asserted itself to excess in the face of the social ego state as egoism. The special type of suicide springing from excessive individualism he labeled as egoistic. Durkheim (1897/1951) argued that suicide varied inversely with the degree of integration of the social groups of which the individual participated. The more weakened the groups to which the individual belonged the less he depended on the group members and the more he depended on only himself. Durkheim (1897/1951) claimed an individual belonging to groups with weak ties recognized no other rules of conduct than those founded on his common interest.

Specifically, Tinto (1993) utilized Durkheim’s argument related to egoistic suicide. Similar to Durkheim, his theory of student departure argued that student dropout varied inversely with the degree of integration in the social groups and communities to which students belonged or identified with. Tinto’s theory emphasized the individual and institutional conditions under which the student’s membership into a smaller or mainstream university community was obstructed. Tinto was sensitive to the fact that while college student communities were rarely permanent as those Van Gennep and Durkheim had in mind the analogy of integration and community membership was still of value. As Tinto (1993) notes, the communities of a college/university were “by
comparison less extensive and weaker than those found in the broader society and may be but one group of a number of communities in which the student has membership” (p. 106).

Few studies have examined the relationship between African American retention and institutional action and integration in U.S. colleges and universities. Using Tinto’s (1993) framework as a general guide D’Augelli and Hershberger (1993) examined the effects of academic factors, social networks, and campus climate between carefully matched groups of Black and White students on a large predominantly White university campus. Emphasizing the dynamic interplay between individual and institutional traits D’Augelli and Hershberger (1993) found that test scores, social networks and campus climate affect African American achievement. D’Augelli and Hershberger (1993) and others (Smith & Allen, 1984; Pascarella & Terenzini, 1991; Tinto, 1987, 1993; Taylor & Olswang, 1997) claimed that research emphasizing the effects of both cognitive and noncognitive factors on student achievement is scarce and argued for more research. The research on institutional effects on retention and achievement is practically nonexistent. In fact, no research has examined the effects of diversity and minority retention initiatives, including specific African American retention initiatives, at U.S. college and university campuses on African American graduation rates.

Research Model for the Study

While Tinto’s (1993) theory of student departure from institutions of higher education is based on an institutional model, all of the factors presented in Figure 1 are presented at the student level. Institutional action attributes, such as a diversity initiative, are not explicitly included. Tinto uses intervening factors, including student
interaction with faculty and peers to suggest how organizational attributes impact student retention. The closest Tinto’s model of institutional departure comes to considering institutional action attributes is under the dimensions of the student’s institutional experiences (column 3 of Figure 1) and the student’s personal/normative integration (column 4). Although it could be argued that many of these latter indicators do reflect institutional action attributes, such as diversity and minority retention initiatives and racial minority group social integration, they are not identified explicitly or examined at the college/university level.

For this study, Tinto’s pre-entry traits of the student (column 1 of Figure 1), goals and commitments of the student at the beginning and the end of the college experience (columns 2 and 5) and the student’s personal/normative integration traits (column 4) are not examined. Rather, this study examined institutional action attributes, such as diversity and minority retention programs considered to be precursors to Tinto’s dimensions of student institutional experiences, (column 3) and student personal/normative integration (column 4). African American population, programs and organizations were examined as a specific type of minority retention initiative and degree of social integration for African American students at predominantly White colleges and universities.

Specifically, this study adapts Tinto’s theoretical framework to explicitly consider the effects of institutional or college/university action, including diversity and minority group retention initiatives and the degree of African American integration at the institutional or college/university level, on African American graduate rates. This adaptation of Tinto’s theoretical framework is presented in Figure 2. As Figure 2 shows, this study examined the effects of these institutional action traits on the African
American graduation rate. The boxes on the left side of Figure 2 list the particular diversity and minority retention initiatives, including degree of African American retention initiatives as a type of social integration were examined. All of these diversity initiatives were offices, programs and organizations created during the 1960s to support the academic and social integration of African American students into mainstream campus life or sub-communities. The first box on the left of Figure 2 lists the particular indicators for diversity and minority group retention including diversity, affirmative action, minority retention and minority students.

**Figure 2.** Conceptual diagram of leaving college/university.

The second box on the left of Figure 2 lists the particular indicators of degree of African American retention as a type of social integration for the African American student at PWCUs. These traits included, but were not limited to percentage of African American students, cultural centers and academic studies (see Figure 2).

To summarize, for this study, Tinto’s (1993) work was used to identify institutional variables that showed promise of being important determinants of the African American
graduation rate in the college/university. Regression was used to examine elements of Tinto’s theory of student departure and whether diversity and minority student retention initiatives have effects on graduation, holding other factors constant. Furthermore, the data were used to further investigate how high minority population traits of institutional action, including diversity, minority student retention, and level of African American retention as social integration affected African American graduation rates. The result was an adapted model. The specific research question in the dissertation is presented below. The hypotheses used to test this question are presented in the methods chapter.

Research Question

All else equal, do diversity and minority group retention initiatives and levels of African American retention/social integration have statistically significant effects on African American graduation rates in predominantly White four-year degree granting U.S. colleges/universities (PWCUs)?
CHAPTER 3

METHODOLOGY

Study Sample and Data Sources

This chapter describes the study sample, data sources, variables, and statistical procedures used. For the study a quantitative cross-sectional research design was used; Units of analysis were U.S. colleges/universities. The most inclusive list of U.S. colleges and universities is available from the National Center for Educational Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS). This data system is located on the NCES website and was accessed using the Peer Analysis System Dataset Cutting Tool (“NCES, 2009”). This tool was used to create a customized dataset. Four basic steps were taken to create the dataset: (1) the year 2005 was selected, (2) the data year option was selected; these two selections ensured that most of the data downloaded for each U.S. college/university would represent the same academic year, 2004-05, regardless of when they were collected, (3) variables of interest were selected, and (4) the data were downloaded from the website into an SPSS™ (SPSS Inc., http://www.SPSS.com) file.

The initial dataset contained 7,018 U.S. colleges/universities. However, all of these institutions did not meet the inclusion criteria for the study. These criteria were: (1) being active or open the year 2005, (2) granting a four-year or Bachelor’s degree, and (3) not being classified as a Historically Black College/University (HBCU). Accordingly 4,675 institutions that were either non-active in 2005 or granted only associate or two-year degrees and/or other non-Bachelor’s awards, certificates and/or diplomas were omitted from the study sample. Eighty-one HBCUs and 29 unknown cases were also dropped. Together, these three inclusion criteria reduced the study sample size to 2,233.
Data on these U.S. colleges/universities were collected from several sources. As mentioned earlier, one of these sources was the NCES Integrated Postsecondary Data System. However, all of the data needed for the study was not available in this system. Thus, additional data on the colleges/universities were collected from the Princeton Review’s Complete Book of Colleges (Princeton Review), 2008 Higher Education Directory (Higher Education), and 2008 College Board College Handbook (College Handbook). Finally, some demographic characteristics of the community in which each college/university was located were obtained from the 2000 Census data (U.S. Census Bureau, 2000).

Only those colleges/universities with data from all data sources were included in the final dataset. Table 2 presents the number and percentage of cases in the study sample included in each of the additional data sources.

**Table 2**

*Number and Percentage of Cases in Study Sample by Data Source (N = 2233)*

<table>
<thead>
<tr>
<th>Directory</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Princeton Review</td>
<td>1533</td>
<td>68.7</td>
</tr>
<tr>
<td>Higher Education</td>
<td>1457</td>
<td>65.2</td>
</tr>
<tr>
<td>College Handbook</td>
<td>1459</td>
<td>65.3</td>
</tr>
<tr>
<td>All directories</td>
<td>1455</td>
<td>65.2</td>
</tr>
</tbody>
</table>

The 2007 edition of the *Princeton Review* was the first of the three directories used to screen cases. The *Princeton Review* provided data on campus organizations and athletic
programs. About 69% of colleges/universities in the study sample were included in this data source. The *Higher Education* and *College Handbook* directories gave information on diversity and minority group retention initiatives. About 65% of colleges/universities in the study sample were included in each of these directories. The next to final study sample consisted of 1,105 of the colleges/universities that were included in all three directories.

Chi-square and independent samples *t*-tests were conducted to examine whether the study sample of bachelor-degree granting four-year colleges/universities included in all three non-NCES data sources differed on selected characteristics from those colleges/universities that were not included in all three of these data sources. Four characteristics were considered: region, school type, total graduation rate, and African American graduation rate.

The results of the chi-square test investigating regional differences by inclusion/exclusion in the study sample are presented in Table 3. Region included eight categories: New England, Mid East, Great Lakes, Plains, Southeast, Southwest, Rocky Mountains, Far West and U.S. Service Schools. The category U.S. Service Schools was deleted from the analysis because the numbers were too small to produce a reliable chi-square. The chi-square test requires that the expected frequency for all cells be 5.0 or higher and five cells (2%) with the U.S. Service Schools category included had an expected count less than five. As Table 3 shows, there is a slight, but statistically significant regional difference between the study sample of colleges/universities and those colleges/universities that were excluded due to failure to report to one or more of the handbooks ($\chi^2 = 37.295$, $df = 7$, $p < .0001$, Cramer’s $V = .129$). The Cramer’s $V$ coefficient corresponds to a small effect size (Cohen, 1988). Those colleges/universities
that failed to report and, thus were excluded from the study, were more likely to be from the Southeast, Southwest, Rocky Mountains, or Far West. About 53% of the excluded colleges/universities were from these regions compared to 43% of those included in the study.

Table 3

*Percentage Distribution of Region by Inclusion/Exclusion in Study Sample (N = 2228)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>All three non-NCES data sources</th>
<th>Study sample</th>
<th>Excluded cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Region</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New England (CT, ME, MA, NH, RI, VT)</td>
<td>9.9% (143)</td>
<td>4.9% (38)</td>
<td></td>
</tr>
<tr>
<td>Mid East (DE, DC, MD, NJ, NY, PA)</td>
<td>19.4% (281)</td>
<td>16.2% (126)</td>
<td></td>
</tr>
<tr>
<td>Great Lakes (IL, IN, MI, OH, WI)</td>
<td>16.6% (241)</td>
<td>14.3% (111)</td>
<td></td>
</tr>
<tr>
<td>Plains (IA, KS, MN, MO, NE, ND, SD)</td>
<td>11.6% (168)</td>
<td>11.6% (90)</td>
<td></td>
</tr>
<tr>
<td>Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)</td>
<td>21.5% (312)</td>
<td>23.4% (182)</td>
<td></td>
</tr>
<tr>
<td>Southwest (AZ, NM, OK, TX)</td>
<td>7.2% (104)</td>
<td>10.3% (80)</td>
<td></td>
</tr>
<tr>
<td>Rocky Mountains (CO, ID, MT, UT, WY)</td>
<td>3.2% (47)</td>
<td>3.9% (30)</td>
<td></td>
</tr>
<tr>
<td>Far West (AK, CA, HI, NV, OR, WA)</td>
<td>10.6% (154)</td>
<td>15.6% (121)</td>
<td></td>
</tr>
<tr>
<td><strong>Percent</strong></td>
<td>100.0% (1450)</td>
<td>100.0% (778)</td>
<td></td>
</tr>
</tbody>
</table>

$\chi^2 = 37.295, \ df = 7, p < .0001; \text{Cramer's } V = .129$
The results of the chi-square test for school type are presented in Table 3. School type included categories of public, private for-profit, private not-for-profit no religious affiliation and private not-for-profit religious affiliated. As Table 4 shows, there is a statistically significant and moderate school type difference between the study sample of colleges/universities and those colleges/universities that were excluded due to failure to report to one or more of the directories ($\chi^2 = 514.200$, $df = 3$, $p < .0001$, Cramer’s $V = .480$). Private for-profit colleges and universities were more likely not to be included in the study sample due to failure to report to one or more of the handbooks. About 39% of excluded colleges/universities were of this school type as compared to 3% of those included in the study.

Table 4

*Percentage Distribution of School Type by Inclusion/Exclusion in Study Sample (N = 2233)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Study sample</th>
<th>Excluded cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Public</td>
<td>33.3% (487)</td>
<td>17.1% (133)</td>
</tr>
<tr>
<td>Private for-profit</td>
<td>3.1% (45)</td>
<td>39.2% (305)</td>
</tr>
<tr>
<td>Private not-for-profit (no religious affiliation)</td>
<td>25.8% (375)</td>
<td>22.1% (172)</td>
</tr>
<tr>
<td>Private-not-for-profit (religious affiliation)</td>
<td>37.9% (551)</td>
<td>21.6% (168)</td>
</tr>
<tr>
<td>Percent</td>
<td>100.0% (1455)</td>
<td>100.0% (778)</td>
</tr>
</tbody>
</table>

$\chi^2 = 514.200$, $df = 3$, $p < .0001$; Cramer’s $V = .480$, $p < .0001$
Independent samples t-tests were conducted to see whether the study sample and the excluded cases differed on total graduation rate and African American graduation rate. As Table 5 shows, the two groups of colleges and universities significantly differed on total graduation rate ($t =15.046$, $df =1,785$, $p < .001$).

Table 5

*Results of t-Tests for Difference in Total Graduation Rate between the Study Sample and Excluded Cases*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$N$</th>
<th>Mean</th>
<th>$SD$</th>
<th>$t^a$</th>
<th>$df$</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study sample</td>
<td>1390</td>
<td>53</td>
<td>19.087</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excluded cases</td>
<td>397</td>
<td>35</td>
<td>27.567</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>18.20</td>
<td>15.046</td>
<td>1,785</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Based on the assumption that the two population variances in total graduation rates are equal.

Specifically, the mean total graduation rate for colleges/universities in the study sample was somewhat higher than that of those colleges/universities that were excluded due to failure to report to one or more of the directories (53% versus 35%). As Table 6 shows, the two groups of colleges/universities also significantly differed on African American graduation rate ($t = 8.399$, $df = 1,616$, $p < .001$).
The mean African American graduation rate for colleges/universities in the study sample also was somewhat higher than that of those colleges/universities that were excluded due to failure to report to one or more of the directories (42% versus 27%).

In sum, colleges/universities that did not report to all three non-NCES data sources were more likely than those that did to be in the Southern and Western U.S., to be private-for-profit institutions, and to have lower total and African American graduation rates. Thus the study findings may not be generalizable to colleges/universities with these characteristics.

Variables of the Study

This section provides the conceptual and operational definitions for the research variables used to address the following research question and hypotheses for the dissertation study.
Research Question

All else equal, do diversity and minority group retention initiatives and levels of African American retention/social integration have statistically significant effects on African American graduation rates in PWCUs?

Research Hypotheses

Diversity and minority group retention initiatives

H1: Holding the effects of other variables constant, colleges/universities with a Director of Diversity will be more likely than other colleges/universities to have significantly higher African American graduation rates.

H2: Holding the effects of other variables constant, colleges/universities with a Director of Affirmative Action/Equal Opportunity will be more likely than other colleges/universities to have significantly higher African American graduation rates.

H3: Holding the effects of other variables constant, colleges/universities with a Dean, Director or program for minority students will be more likely than other colleges/universities to have significantly higher African American graduation rates.

African American retention/social integration

H4: Holding the effects of other variables constant, the percentage of African American students will have a statistically significant positive effect on African American graduation rates.

H5: Holding the effects of other variables constant, colleges/universities with a Black cultural center will be more likely than other colleges/universities to have significantly higher African American graduation rates.

H6: Holding the effects of other variables constant colleges/universities with an African American/Black Studies program will be more likely than other colleges/universities to have significantly higher African American graduation rates.
Dependent Variable

The dependent variable investigated in the study is the college/university African American bachelor degree graduation rate. The dependent variable, African American graduation rate was recoded and labeled BLKGRAD. The values for the dependent variable BLKGRAD were observed in percentages. The operational definition for BLKGRAD was the “6-year graduation rate of the sub-cohort of full-time, first-time students seeking a bachelor’s or equivalent degree” for the 1999 bachelor's subcohort at 4-year institutions (“NCES, 2009”).

For the study the dependent variable BLKGRD was transformed into a logit value. A logit transformation is a standard transformation used for a percentage. This was necessary because the untransformed percentage, with a bounded range of 0-100, leads to a violation of the equal-variance assumption of regression (Allison, 1999). Specifically, the logit is defined as the natural logarithm of

\[ P/(1−P) \]

where \( P \) is the proportion of African Americans out of all African Americans at the college/university that graduated. To calculate \( P \) the percentage of African Americans at the college or university that graduated was divided by 100.

Fox (1997) argued that the “logit and probit transformations cannot be applied to proportions of exactly 0 or 1” (p. 80). Furthermore, if the researcher has access to the original counts on which the proportions \( P \) are based, then the formula below should be used in place of \( P \).

\[ P' = F + \frac{1}{2} \frac{1}{N + 1} \]
Here, $F$ is the frequency count in the focal category (e.g. number of degrees completed for Blacks) and $N$ is the total count (e.g. total number of Black students at the college/university). Since the original counts were not available $P'$ was calculated using the formula below.

$$P' = .005 + .99 \times P$$

Using the above formula to calculate $P'$ the following logit formula was used to calculate the dependent variable BLKGRAD.

$$\left(\frac{P'}{1-P'}\right)$$

The next section presents the independent variables in the analysis and includes their conceptual and operational definitions.

**Independent Variables (Institutional Action)**

The independent variables were chosen for the study because they were expected to affect African American retention and achievement at PWCUs. As discussed in Chapter 2, each of the independent variables is a type of institutional action, and they include diversity and minority group retention initiatives and African American retention/social integration (Richardson & Skinner, 1991; Tinto, 1993; Feagin, Vera, & Imani, 1996; Pascarella & Terenzini, 1991; 1997, Levine, 1993; Bobo, 2000; Hurtado, 2007). Specifically, the institutional action variables used for the study were: diversity, affirmative action/equal opportunity, minority student retention, percentage African American students, Black cultural center, and African American/Black Studies program. Diversity and minority group retention initiatives were measured by diversity, affirmative action/equal opportunity and minority student retention. The levels of African American
student retention/social integration on campus were measured by percentage African American students, Black cultural center and African American/Black Studies. The official website for the Association of Black Cultural Centers and Higher Education were used to triangulate data on African American student organizations and Black cultural centers. The names, labels, and coding schemes for all of these institutional action variables are presented in Table 7 and are described one-by-one below.
### Table 7

**Independent Variable Names, Labels and Coding Scheme (Institutional Action)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Label - Data source</th>
<th>Coding scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diversity/Minority Group Retention Initiatives</strong>&lt;sup&gt;9&lt;/sup&gt;</td>
<td>Nominal</td>
<td>Director of diversity – <em>HE</em></td>
<td>1= Yes, 0=Everyone else</td>
</tr>
<tr>
<td>DIV</td>
<td>Nominal</td>
<td><strong>HE</strong></td>
<td></td>
</tr>
<tr>
<td>AAEHO</td>
<td>Nominal</td>
<td>Director of Affirmative Action/Equal Opportunity – <em>HE</em></td>
<td>1= Yes, 0=Everyone else</td>
</tr>
<tr>
<td>MSTUD</td>
<td>Nominal</td>
<td>Dean or Director of Minority student services – <em>HE, CH</em></td>
<td>1= Yes, 0=Everyone else</td>
</tr>
<tr>
<td><strong>African American Retention/Social Integration</strong></td>
<td>% of African American enrollment – <em>NCES</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERBLKS</td>
<td>Interval-ratio</td>
<td>Percent of African American enrollment – <em>NCES</em></td>
<td></td>
</tr>
<tr>
<td>BCC</td>
<td>Nominal</td>
<td>Black cultural center – <em>CH/BCC Website</em></td>
<td>1= Yes, 0=Everyone else</td>
</tr>
<tr>
<td>AABS</td>
<td>Nominal</td>
<td>African American/Black studies program - <em>CH</em></td>
<td>1= Yes, 0=Everyone else</td>
</tr>
</tbody>
</table>

<sup>9</sup> denotes a note or reference not visible in the image.
Diversity and Minority Group Retention Initiatives

The college/university’s Diversity initiative was measured as a dummy variable. This variable, DIV, was coded 1 if the college/university had an administrative position for Director of Diversity listed in the Higher Education directory. Otherwise, the variable was coded 0. Colleges/universities with administrative positions for diversity were expected to have higher levels of African American graduation than institutions without a position for diversity.

The college/university’s Affirmative Action/Equal Opportunity initiative was also measured by a dummy variable. This variable, AAEO, was coded 1 if the college/university listed an administrative position for Director of Affirmative Action/Equal Opportunity in the Higher Education Directory, and coded 0 otherwise. Colleges/universities with affirmative action/equal opportunity directors were expected to have higher levels of African American graduation than institutions without affirmative action/equal opportunity directors.

A dummy variable, MSTUD, was also used to represent Minority Student Retention, services, and/or programs on campus. The variable was coded 1 if the college/university listed a Dean or Director of Minority Students in the Higher Education directory or an office or Department of Minority Student Services in the College Handbook. Otherwise, the variable was coded 0. At PWCU's minority student services and programs affect the orientation, retention and academic support of African American, as well as other minority, students and social organizations. Colleges and universities with an administrative position, office, or department for minority students as compared to those without these initiatives were expected to have higher levels of African American graduation.
African American Retention/Social Integration

Also constructed from data obtained from the NCES, Percent African American Students (PERBLKS) was an indicator of African American retention or critical mass of African Americans on campus. A critical mass is a requisite for forming African American organizations, communities and subcultures on predominantly White campuses (Hurtado, 2007; Neimann & Maruyama, 2005; Foster, 2003). The operational definition for PERBLKS was the percentage of students enrolled for credit that is African American or Black non-Hispanic. As defined earlier, according to the NCES, “African American/Black non-Hispanic was a person having origins in any of the black racial groups of Africa except those of Hispanic origin” (“NCES, 2009”). Specifically, PERBLKS was constructed by dividing the number of African American/Black non-Hispanic students enrolled by the number of all students enrolled times 100.

The last three indicators of African American retention/social integration on campus, BCC and AABS, were dummy variables. African American student organizations may include, but are not limited to Black student associations, national Pan-Hellenic councils, NAACP chapters, gospel choirs, Society of Black Journalists, Society of Black Engineers, Society of Black Business Students and Black cultural centers. BCC, or Black Cultural Center, was coded 1 if the college/university listed such a center in the College Handbook or if it was an institutional member on the official website of the Association of Black Cultural Centers. Otherwise, BCC was coded 0. And, AABS, or African American/Black Studies, was coded 1 if the college/university listed an African American/ Black Studies program within the academic curriculum of the college/university in the College Handbook. Otherwise, AABS was coded 0. Each of these two initiatives—Black cultural centers and African American/Black studies
programs—contributes to the formation and maintenance of African American communities and subcultures and social integration on PWCUs, and their presence was expected to increase African American graduation.

**Control Variables (Social and Demographic)**

The control variables used for the study reflected various social and demographic attributes of U.S. colleges/universities that the literature suggests may also affect African American graduation rates (Pascarella & Terenzini, 1991; Porter, 1989). The names, labels, coding schemes, and data sources for the control variables are presented in Table 8. From the NCES, these variables included control affiliation (private, religious, public), region (northeast, midwest, west, and south), locale (suburb, town, rural, and city), total school enrollment, percentage female enrollment, college affordability index, student-to-faculty ratio, the percentage of students receiving financial aid from the college/university, and first-year retention rate. Two additional variables were obtained from the Princeton Review; these were the total number of registered student organizations on campus and the athletic division of the college/university (Division I, Division II, Division III, and NAIA or none, see Appendix C). Lastly, 2000 census data provided the percentage of the population in the college/university’s city that is African American.
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Label - Data source</th>
<th>Coding scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBLIC</td>
<td>Nominal; 4 unranked categories (PUBLIC, PRIVATE, and RELIG-PRIVATE); created 2 new dummy variables; the reference group = PRIVATE</td>
<td>School type (public, private, Religious-private) - NCES</td>
<td>Yes =1, 0=everyone else</td>
</tr>
<tr>
<td>SIZE</td>
<td>Interval-ratio</td>
<td>Number of full-time undergraduate enrollment - NCES</td>
<td></td>
</tr>
<tr>
<td>CAI</td>
<td>Interval-ratio</td>
<td>College affordability index - NCES</td>
<td></td>
</tr>
<tr>
<td>SFRATIO</td>
<td>Interval-ratio</td>
<td>Student to faculty ratio - NCES</td>
<td></td>
</tr>
<tr>
<td>ORG</td>
<td>Interval-ratio</td>
<td>Number of registered student organizations - PR</td>
<td></td>
</tr>
<tr>
<td>PERFAID</td>
<td>Interval-ratio</td>
<td>Percent institutional grant aid - NCES</td>
<td></td>
</tr>
<tr>
<td>PERFYRET</td>
<td>Interval-ratio</td>
<td>Percent first-year retention - NCES</td>
<td></td>
</tr>
<tr>
<td>PERMIN</td>
<td>Interval-ratio</td>
<td>Percent American Indian, African American, Asian American and Hispanic American undergraduate student enrollment - NCES</td>
<td></td>
</tr>
<tr>
<td>PERWOM</td>
<td>Interval-ratio</td>
<td>Percent of female enrollment - NCES</td>
<td></td>
</tr>
<tr>
<td>PERBLKCity</td>
<td>Interval-ratio</td>
<td>Percent American Americans in the city – U.S. Census Bureau</td>
<td></td>
</tr>
<tr>
<td>DIV1</td>
<td>Nominal; 5 unranked categories (NONE, DIV1, DIV2, DIV3 and NAIA); created 4 new dummy variables; the reference group = NONE</td>
<td>Athletic division (div1, div2, div3, NAIA, and none) - PR</td>
<td>Yes =1, 0=everyone else</td>
</tr>
<tr>
<td>DIV2</td>
<td></td>
<td></td>
<td>Yes =1, 0=everyone else</td>
</tr>
<tr>
<td>DIV3</td>
<td></td>
<td></td>
<td>Yes =1, 0=everyone else</td>
</tr>
<tr>
<td>NAIA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SURBURB</td>
<td>Nominal; 4 unranked categories (CITY, SUBURB, TOWN, and RURAL); created 3 new dummy variables; the reference group = CITY</td>
<td>Environment (city, suburb, town, and rural) - NCES</td>
<td>Yes =1, 0=everyone else</td>
</tr>
<tr>
<td>TOWN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RURAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NORTHEAST</td>
<td>Nominal; 9 unranked categories (NORTHEAST, MIDWEST, WEST, and SOUTH); created 3 new dummy variables; the reference group = SOUTH</td>
<td>Region (northeast, midwest, west, &amp; south) –NCES</td>
<td>Yes =1, 0=everyone else</td>
</tr>
<tr>
<td>MIDWEST</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEST</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Statistical Procedures

Multiple regression was the statistical analysis used in this study. According to Allison (1999) “multiple regression is a statistical method for studying the relationship between a single dependent variable and one or more independent variables” (p. 1). This study regressed the logit transformation of the dependent variable African American graduation rate on the independent and control variables. The independent variables were indicators of diversity and minority group retention initiatives and African American retention/social integration on campus. The regression analysis permitted examination of the impact of these indicators on African American graduation rates, controlling for the effects of social and demographic factors thought to affect African American graduation.

Assumptions of Multiple Regression

Assumptions for multiple regression models are usually expressed in the form of equations and embody notions of causal effects of the independent variables on the dependent variable in the model (Allison, 1999).

For example: \[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots + \varepsilon \]

To use multiple regression analysis, Allison (1999) claimed that the following five basic assumptions must be met: linearity, mean independence, homoscedasticity, uncorrelated disturbances and normal disturbance. First, to address the linearity assumption the dependent variable must be a linear function of the independent variables plus a random disturbance term. Second, to address the assumption of mean independence the mean or average value for the disturbance term must not depend on the independent variables. Third, to address the homoscedasticity assumption the
variance of the random disturbance ($\varepsilon$) cannot depend on the independent variables. This assumption was the reason a logit transformation (described earlier) of the dependent variable African American graduation rate was used. The percentage violated the equal-variance assumption. The logit transformation does not. Fourth, to address the assumption of uncorrelated disturbances the value of the random disturbance for any institution in the sample must be uncorrelated with the value of the random disturbance for any other institution. And lastly, to address the assumption of normal disturbance the random disturbance must have a normal distribution.

For the dissertation several regression models were conducted to see if diversity/minority group retention and African American/social integration initiatives could predict African American graduation rate. While not an assumption, sample size, multivariate outliers and multicollinearity is sometimes a problem for multiple regression. Multivariate outliers “are extreme scores on either the criterion or the predictor variables” (Meyers, Gamst, & Guarino 2006, p. 198). Multicollinearity is a condition that exists when more than two predictors are highly correlated (Meyers et al., 2006).

Sample Size for the Study

A large number of cases are needed for multivariate analysis. The dissertation study used an appropriate sample size ($N = 1105$). According to Milton (1986) samples with the proposed number of variables should contain at least 39 observations for use with multiple regression equations. Compared to other sources Milton’s (1986) cases to independent variable ratio is quite conservative. Meyers, Gamst & Guarino (2006) claimed that sample sizes of more acceptable proportions include 20 or more cases per
predictor (p. 165). According to the Princeton University online data and statistical services website the lowest the ratio should be is five cases to every independent variable in the model (“Princeton Review,” 2008).

Outliers

The Mahalanobis distance score analysis was conducted to check for outliers (Meyers, Gamst & Guarino 2006). The test detected 30 potential outliers, and those cases were dropped from the regression analysis. Although the subsequent implications of these results were essentially the same, the results excluding the outliers are reported. Details regarding this issue are noted in the following chapter.

Multicollinearity

Diagnostic multicollinearity assessments were conducted. Tolerance and Variance Inflation Factor (VIF) statistics showed that multicollinearity was not a problem. “Tolerance values range from 0 to 1; multicollinearity is indicated for a particular variable if the tolerance value is .20 or less” (Meyers, Gamst, & Guarino 2006, p. 212). According to Chatterjee, Hadi and Price (2000), a VIF in excess of 10 “is an indication that multicollinearity may be causing problems in estimation” (p. 240). All tolerance values were over .20 and all VIF levels were under 5, indicating no problems of multicollinearity. Chapter 4 presents the findings for the data analysis including descriptive statistics, multiple regression and the strengths and limitations of the research design.
CHAPTER 4
DATA ANALYSIS

Descriptive Statistics

This section describes the descriptive statistics for the variables in the research design. Tables 9 and 10 present the mean and standard deviations for the African American graduation rate (dependent), institutional action and social and demographic (independent) variables. The average African American graduate rate for U.S. colleges/universities in the sample was 43%, \( M = 42.72 \).

Table 9

Means and Standard Deviations of African American Graduation Rate and Institutional Action Variables \((n = 1105)\)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American graduation rate</td>
<td>42.72</td>
<td>24.35</td>
</tr>
<tr>
<td>LN African American graduation rate(^a)</td>
<td>-.47</td>
<td>1.82</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director of diversity</td>
<td>.39</td>
<td>.487</td>
</tr>
<tr>
<td>Director of affirmative action/equal opportunity</td>
<td>.23</td>
<td>.419</td>
</tr>
<tr>
<td>Dean/Director of or program for minority students</td>
<td>.58</td>
<td>.494</td>
</tr>
<tr>
<td>Percent African American student enrollment</td>
<td>8.43</td>
<td>9.30</td>
</tr>
<tr>
<td>Black cultural center</td>
<td>.13</td>
<td>.340</td>
</tr>
<tr>
<td>African American/Black studies program</td>
<td>.14</td>
<td>.346</td>
</tr>
</tbody>
</table>

\(^a\)LN = natural logarithm
The independent variables, institutional action, were of two types: diversity and minority group retention and African American retention/social integration initiatives. Diversity and minority group retention initiatives consisted of diversity, affirmative action/equal opportunity and minority student retention. African American retention/social integration consisted of percentage African American student enrollment, Black cultural center and African American/Black Studies organization.

For diversity and minority group retention initiatives, of all colleges/universities, 39% ($M = .39$) had a director of diversity; 23% ($M = .23$), had a director of affirmative action/equal opportunity, and 58% ($M = .58$) had a dean, director or program for minority student. For African American retention/social integration, Black cultural centers and African American/Black Studies programs were in 13% ($M = .13$) and 14% ($M = .14$) of the colleges and universities, respectively. Of all colleges/universities the average percentage of African American student enrollment was around 8% ($M = 8.43$).

Table 10 presents the social and demographic variables. Of all colleges/universities, the percentage of public institutions was 36% ($M = .36$); total undergraduate student enrollment was on average, 7,170 ($M = 7169.76$); number of student organization on average, 102 ($M = 102.34$); and student to faculty ratio on average, 25:1 ($M = 24.90$). For all colleges/universities in the sample the average percentage of: first-year retention was 76% ($M = .75.45$); financial aid, 63% ($M = .63.61$); women enrollment, 59% ($M = 58.46$); minority enrollment, 18% ($M = 18.39$) and African Americans population in the city, 16% ($M = 15.93$). The athletic programs in the colleges/universities were Division I, 24% ($M = .24$); Division II, 18% ($M = .18$); Division III, 31%, ($M = .31$); and NAIA, 16% ($M = .16$). The college/university in the sample
located in a suburb was 20% ($M = .20$); town, 24% ($M = .24$), and rural environment, 6% ($M = .06$). The college/university in the sample was located in the Northeast, 27% ($M = .27$); Midwest, 30% ($M = .30$); and West, 13% ($M = .13$) regions of the United States.

Table 10

Means and Standard Deviations for Social and Demographic Variables ($n = 1105$)

<table>
<thead>
<tr>
<th>Control Variables</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent first-year retention</td>
<td>75.45</td>
<td>11.51</td>
</tr>
<tr>
<td>Public (ref. category = private)</td>
<td>36</td>
<td>.48</td>
</tr>
<tr>
<td>Total student enrollment</td>
<td>7169.76</td>
<td>8720.90</td>
</tr>
<tr>
<td>LN total student enrollment^a</td>
<td>8.27</td>
<td>1.11</td>
</tr>
<tr>
<td>College affordability index</td>
<td>2.31</td>
<td>1.54</td>
</tr>
<tr>
<td>Student to faculty ratio</td>
<td>24.90</td>
<td>18.27</td>
</tr>
<tr>
<td>Number of student organization</td>
<td>102.34</td>
<td>116.74</td>
</tr>
<tr>
<td>LN number of student organization^a</td>
<td>4.16</td>
<td>1.01</td>
</tr>
<tr>
<td>Percentage institutional grant aid</td>
<td>63.61</td>
<td>30.74</td>
</tr>
<tr>
<td>Percent women student enrollment</td>
<td>58.46</td>
<td>12.25</td>
</tr>
<tr>
<td>Percent minority student enrollment</td>
<td>18.39</td>
<td>13.96</td>
</tr>
<tr>
<td>Percent African Americans in city</td>
<td>15.93</td>
<td>17.19</td>
</tr>
<tr>
<td>Division I athletics (ref. category = none)</td>
<td>.24</td>
<td>.43</td>
</tr>
<tr>
<td>Division II athletics</td>
<td>.13</td>
<td>.38</td>
</tr>
</tbody>
</table>

(table continues)
Multiple Regression

Three multiple regressions were conducted to identify the contributing factors of African American graduation rates. Table 11 presents regression estimates predicting institutional action on African American graduation. The first model included institutional actions traits in the college/university. In the second model, the first-year retention rate variable was added to the variables of Model 1. The third model added social and demographic controls.
### Table 11

**Multiple Regression Estimates Predicting the (Logit of) African American Graduation Rate in U.S. Colleges/Universities (n = 1075)**

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \beta )</td>
<td>( \beta )</td>
<td>( \beta )</td>
</tr>
<tr>
<td></td>
<td>(Std. Error)</td>
<td>(Std. Error)</td>
<td>(Std. Error)</td>
</tr>
<tr>
<td>Diversity Initiatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diversity</td>
<td>.249*</td>
<td>.113</td>
<td>.097</td>
</tr>
<tr>
<td></td>
<td>(.116)</td>
<td>(.109)</td>
<td>(.109)</td>
</tr>
<tr>
<td>Affirmative Action/EEO</td>
<td>.074</td>
<td>.030</td>
<td>.125</td>
</tr>
<tr>
<td></td>
<td>(.133)</td>
<td>(.125)</td>
<td>(.136)</td>
</tr>
<tr>
<td>Minority student retention</td>
<td>.348**</td>
<td>.050</td>
<td>.036</td>
</tr>
<tr>
<td></td>
<td>(.119)</td>
<td>(.113)</td>
<td>(.115)</td>
</tr>
<tr>
<td>African American/Soc. Integration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Black student</td>
<td>-.006</td>
<td>.022**</td>
<td>.004</td>
</tr>
<tr>
<td></td>
<td>(.007)</td>
<td>(.007)</td>
<td>(.012)</td>
</tr>
<tr>
<td>Black cultural center</td>
<td>.431**</td>
<td>.265*</td>
<td>.296*</td>
</tr>
<tr>
<td></td>
<td>(.168)</td>
<td>(.157)</td>
<td>(.159)</td>
</tr>
<tr>
<td>African American/Black Studies</td>
<td>.656***</td>
<td>.044</td>
<td>-.060</td>
</tr>
<tr>
<td></td>
<td>(.163)</td>
<td>(.160)</td>
<td>(.166)</td>
</tr>
<tr>
<td>Social and demographic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent first-year retention</td>
<td>.069***</td>
<td>.420</td>
<td>.041***</td>
</tr>
<tr>
<td></td>
<td>(.005)</td>
<td>(.007)</td>
<td>(.007)</td>
</tr>
<tr>
<td>Control affiliation (ref=private)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>-.981***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.197)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LN Size of enrollment(^a)</td>
<td></td>
<td>.107</td>
<td>.066</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.110)</td>
<td></td>
</tr>
</tbody>
</table>

*(table continues)*
Table 11 (continued).

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B (Std. Error)</td>
<td>β (Std. Error)</td>
<td>B (Std. Error)</td>
</tr>
<tr>
<td>College affordability index</td>
<td>.042 (.045)</td>
<td>.027</td>
<td></td>
</tr>
<tr>
<td>Student to faculty ratio</td>
<td>-.005 (.007)</td>
<td>-.027</td>
<td></td>
</tr>
<tr>
<td>LN Number of student organization*</td>
<td>.304** (.111)</td>
<td>.164</td>
<td></td>
</tr>
<tr>
<td>Percent institutional grant aid</td>
<td>-.003 (.003)</td>
<td>-.045</td>
<td></td>
</tr>
<tr>
<td>Percent women enrollment</td>
<td>.016*** (.004)</td>
<td>.106</td>
<td></td>
</tr>
<tr>
<td>Percent minority enrollment</td>
<td>.004 (.006)</td>
<td>.028</td>
<td></td>
</tr>
<tr>
<td>Percent Blacks in the city</td>
<td>.002 (.004)</td>
<td>.017</td>
<td></td>
</tr>
<tr>
<td>Athletic division (ref=none)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Division I athletics</td>
<td>.367 (.250)</td>
<td>.087</td>
<td></td>
</tr>
<tr>
<td>Division II athletics</td>
<td>.224 (.223)</td>
<td>.048</td>
<td></td>
</tr>
<tr>
<td>Division III athletics</td>
<td>.547** (.207)</td>
<td>.141</td>
<td></td>
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<tr>
<td>Suburb</td>
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(table continues)
Table 11 (continued).

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<th>Predictors</th>
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Note. * p ≤ .05 ** p ≤ .01 *** p ≤ .001
LN = natural logarithm
Each model included a sufficient sample size ($N = 1075$). As mentioned in the methods chapter, multicollinearity was not a problem. Also discussed in Chapter 3, in sensitivity analysis, 30 outliers were detected using Mahalanobis distance analysis and dropped from the regression. Results were essentially similar to those including the outliers. Only two minor changes in the effects of two of the control variables were in the observed third model. Specifically, the regression coefficient for DIV I was no longer significant. And the coefficient for TOWN became significant but had a diminutive effect. The results excluding the outliers are presented in the chapter.

Table 11 presents regression estimates predicting the logit of the African American graduation rate in U.S. colleges/universities for all three models. Model 1 shows that the institutional action of variables, including diversity, affirmative action/equal opportunity, minority student retention, percentage African American student enrollment, Black cultural center and African American/Black Studies, significantly predicted African American graduation rate, $F (6, 1068) = 11.848, p < .001$, with four of 6 variables significantly contributing to the prediction. The $R^2$ for African American graduation rate with six predictors was .06. The corresponding adjusted $R^2$ value was .057 with a small effect size (Cohen, 1988). Only 6% of the variance on African American graduation rate was explained by the model including only the institutional action variables.

Presented in Table 11, the regression coefficients suggest that several of the institutional action variables seem to have an impact on African American graduation rates. Three of the six variables represent the first category of institutional action initiatives, Diversity and Minority Group Retention. Only two factors show expected
positive effects on the African American graduation rate including having a position for
director of diversity and minority student retention. Two of three variables in the second
category of institutional action initiatives, African American/Social Integration, had
statistically significant effects on the African American graduation rate.

The unstandardized coefficient of $B = .348$ ($\beta = .095$, $p < .01$) indicates that
colleges and universities with a dean, director or program for minority students were
more likely than colleges and universities without those minority student retention
initiatives to have higher African American graduation rates. Similarly, the
unstandardized coefficient of $B = .431$ ($\beta = .082$, $p < .01$) for Black cultural center
indicates that colleges and universities with Black cultural centers were significantly
more likely than colleges and universities without those African American organizations
to have higher African American graduation rates. Finally, on average colleges and
universities with a director of diversity ($\beta = .067$; $p < .05$) graduated more of their African
American students than those without a director of diversity. A director of affirmative
action/equal opportunity had no effect on African American graduation rate.

Model 2 shows that this combination of variables significantly predicted African
American graduation rate, $F (7, 1067) = 34.605$, $p < .001$, with the inclusion of the
additional variable for first-year retention significantly contributing to the prediction.
When percentage first-year retention was added to the model, percentage of African
American students, Black cultural center and percentage first-year retention combined
accounted for 18% of the variance ($R^2 = .185$) in African American graduation rate with
a medium effect size (Cohen 1988). Adding percentage first-year retention only
improved the fit of the model, increasing variance in African American graduation rate
by 12%. The significant predictors in the model were percentage first-year retention, African American student enrollment, and Black cultural center. Percent first-year retention (β= .420, \( p < .001 \)) had a highly significant positive effect on African American graduation, controlling for other variables. Holding the effects of other variables constant, percentage African American student enrollment (β= .093, \( p < .01 \)) also had a significant positive effect on African American graduation. And as in Model 1, colleges and universities with Black cultural center (β= .050) tended to have higher African American graduation rates than other colleges and universities without centers. The effects of the diversity initiative predictors observed in Model 1 lost statistical significant at the .05 level in Model 2.

Model 3 included 19 control variables (social and demographic) in addition to 6 institutional action variables and first year retention variable. Model 3 shows that this combination of variables significantly predicted African American graduation rate, \( F(26, 1048) = 14.303, p < .001 \), with the inclusion of the additional social and demographic variables significantly contributing to the prediction. The multiple \( R^2 \) for African American graduation rate with 26 predictors was .262. The corresponding adjusted \( R^2 \) value was .244 with an increased effect size. This indicates that 24% of the variance on African American graduation rate was explained by the model. Model 3 was the best fitting model (\( R^2_{model1} = .062, R^2_{model2} = .185, R^2_{model3} = .262 \)). The coefficients presented in Table 11, suggests that predictors of social and demographic traits in U.S. colleges and universities affect African American graduation rates.

The unstandardized coefficient of -.981 (β = -.261) for public showed that all else equal, public colleges/universities tended to have lower African American graduation
rates than private colleges and universities. The percentage first-year retention ($\beta = .247$) had a highly significant positive effect on African American graduation rates. The percentage women enrollment ($\beta = .106$) had a highly significantly positive effect on African American graduation. There was also a significant positive relationship between African American graduation rates and number of student organizations ($\beta = .164$).

The unstandardized coefficient of $547 (\beta = .141, p < .01)$ for Division III athletics showed that colleges/universities in Division III on average had higher African American graduation rates than colleges and universities with no athletic division, holding other variables constant. Colleges/universities in the Midwest region ($\beta = -.426$) on average had lower African American graduation rates than colleges and universities in the South. The unstandardized coefficient of $257 (\beta = .061, p < .05)$ for town showed that on average, colleges/universities in towns had higher graduation rates than colleges and universities located in the city.

Only one of the six institutional action variables in Model 3 was significant. Colleges and universities with a Black cultural center ($\beta = .296$) tended to have higher African American graduation rates than colleges and universities without Black cultural centers. In summary, traits in U.S. colleges/universities show some promise as predictors of African American graduation. Eight predictors of institutional action initiatives and social and demographic attributes had significant effects on African American graduation rates.
Limitations and Strengths of the Research Design

This section discusses the limitations of the research design, steps taken to address those limitations and strengths of the design. As stated in Chapter 1, a major limitation of the dissertation study was that the data collected were cross-sectional. Data on African American graduation rates and social, demographic and institutional action traits in U.S. colleges were collected for the year 2005. Findings from the data are not generalizable beyond this point in time. Data collected for the study included information on diversity, minority group and African American retention/social integration initiatives in U.S. colleges and universities that are not readily accessible. Thus, the use of cross-sectional rather than longitudinal data and four data sources were essential.

Limitations in regression analyses may also include measurement error, sampling error and uncontrolled variation. In regression analysis it is impossible to measure variables with perfect accuracy. Measurement error within variables can produce underestimated or overestimated regression coefficients (Allison, 1999). Using small samples may produce erroneous sample estimates or sampling error. Small sample estimates raise reliability concerns because they produce coefficients that are very unreliable. Yet, on the other hand large samples may produce coefficients with trivial effects that are statistically significant. Uncontrolled variation of variables or the inability to observe the mediating effects of some variables on other variables may misconstrue the relationship between the independent variables and the dependent variable (McClendon, 1994).

The following steps were taking to address the issues mentioned above. To limit measurement errors theoretical consideration was given to each independent variable...
included in the regression model and several sources were used to collect the primary data (e.g. diversity, minority and African American student retention) for the dissertation research. A large and generalizable study sample ($N = 1075$) was used for the study, to address issues of sampling error and uncontrolled variation. The research design for the dissertation consisted of two major strengths. The study sample was large enough to be used for future explanatory analyses. Furthermore, unlike previous studies on African American retention and achievement institutional rather than individual level of analysis was used to examine African American graduation rates.
CHAPTER 5
SUMMARY AND DISCUSSION

Summary

For the dissertation study, elements of Tinto’s theory of leaving college/university (e.g. institutional experiences and personal/normative integration) and an in-depth analysis of data, including descriptive statistics and multiple regressions were used to examine African American graduation rates in predominantly White colleges and universities (PWCUs). Tinto’s (1993) work provided the framework for identifying institutional variables that showed promise of being important determinants of the African American graduation rate. The result was an adapted model, which focused on noncognitive factors and whether institutional action such as diversity, minority group, and African American retention/social integration initiatives helped explain graduation.

For the research model African American graduation rate was regressed on a set of institutional action and control variables to address, primarily, one main research question. All else equal, do diversity and minority group retention initiatives and levels of African American retention/social integration have statistically significant effects on African American graduation rates at PWCUs? The research findings indicated that there is a statistically significant relationship between African American graduation rates and seven of the predictors used for the study. Most importantly, the categorical variable for African American retention/social integration, Black cultural center showed promise for predicting African American graduation rates. Colleges and universities with Black cultural center had higher African American graduation rates than colleges/universities without cultural centers. Further findings showed that colleges and universities with, higher first-year retention rates, higher percentages of women
enrolled, higher numbers of student organizations, plus in Division III athletic conferences and located in towns had higher African American graduation rates. Furthermore, colleges and universities that were public and located in the Midwest region had lower African American graduation rates than those that were private and located in the South.

Summary of Hypotheses

Three different multiple regressions were conducted using a set of 6 institutional action and 25 social and demographic variables. All six institutional action variables, including diversity and minority group retention and African American retention/social integration variables were expected to have statistically significant positive effects on African American graduation rates. However, the predictability of all but for the “Black cultural centers,” the variables in the institutional action domain was not significant. Table 12 provides a summary of the hypotheses that were tested.

Table 12

Summary of Hypotheses

<table>
<thead>
<tr>
<th>Hypotheses/Variable</th>
<th>Results*</th>
</tr>
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<tr>
<td>H1 Director of Diversity</td>
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</tr>
<tr>
<td>H2 Director of Affirmative Action/Equal Opportunity</td>
<td>Rejected</td>
</tr>
<tr>
<td>H3 Dean, Director or Program of Minority Students</td>
<td>Rejected</td>
</tr>
<tr>
<td>H4 Percent African American Student Enrollment</td>
<td>Rejected</td>
</tr>
<tr>
<td>H5 Black Cultural Center</td>
<td>Supported</td>
</tr>
<tr>
<td>H6 African American/Black Studies Program</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

*Research hypotheses that were supported were significant at the .05 level.
The 19 control variables (social and demographic domain) included in the study were expected to be significant (Allen, 1985; Porter, 1989; Pascarella & Terenzini, 1991). One control variable in particular, percentage first-year retention was expected to significantly contribute to the predictability of the model (see Model 2 in Table 11).

Significant Findings

**Diversity and Minority Group Retention Initiatives**

The findings indicate that no relationship exists between African American graduation rates and college and university initiatives for diversity and minority group retention. In the institutional action domain, the variables, *director of diversity, director of affirmative action/equal opportunity,* and *dean, director or program for minority students* were expected to have statistically significant positive effects on African American graduation rates. These findings are not consistent with the literature on the benefits of diversity, affirmative action/equal opportunity and minority group retention initiatives on African American retention and achievement which emphasized the role of these initiatives in contributing to the social integration, retention, and achievement of minority and African American students on predominantly White campuses (Harper & Hurtado, 2007; Seidman, 2005; Hurtado, 2005; Knight & Hebl, 2005; Pinel, Warner, & Chua, 2005; Bobo, 2000; Levine, 1993; Richardson & Skinner, 1991; D’Augelli & Hershberger, 1993; Tinto, 1993). On one hand, these findings may be interpreted as showing that these types of institutional action: diversity, affirmative action/equal opportunity and minority retention initiatives have no effect on African American graduation. On the other hand, these findings may suggest something about theories of
minority retention and achievement, and the limitations of data used for the dissertation and future research on African American retention and graduation.

Hypothesis 1

Hypothesis 1 predicted that controlling for other variables, director of diversity would significantly affect African American graduation rate. The variable director of diversity yielded unexpected results, as it failed to predict African American graduation. The hypothesis that holding the effects of other variables constant, colleges and universities with a director of diversity will be more likely than other colleges and universities to have significantly higher graduation rates was not supported.

Hypothesis 2

Hypothesis 2 predicted that controlling for other variables, director of affirmative action/equal opportunity would significantly affect African American graduation rate. This hypothesis, however, is rejected. The hypothesis that holding the effects of other variables constant, colleges and universities with a director of affirmative action/equal opportunity will be more likely than other colleges and universities to have significantly higher graduation rates was not supported.

Hypothesis 3

Hypothesis 3 postulated that controlling for other variables, dean, director or program for minority students would significantly affect African American graduation rate. The variable dean, director of program for minority students failed to predict
African American graduation. The hypothesis that holding the effects of other variables constant, colleges and universities with a dean, director, or program for minority students will be more likely than other colleges and universities to have significantly higher graduation rates was not supported.

*African American Retention/Social Integration*

The findings indicate that a relationship does exist between African American graduation rates and college/university initiatives for African American retention and social integration, and Black cultural centers in particular. In the institutional action domain the variables, *percentage African American students, Black cultural center, and African American/Black Studies* were expected to have statistically significant positive effects on African American graduation rates. These findings are consistent with the literature on the benefits of specific retention initiatives for African Americans on their retention and achievement (Foster, 2003; Williamson, 2000; Tinto, 1993; Levine, 1993). However, only one of the three predictors, *Black cultural center* was consistent with the literature which argues the benefits of cultural centers, a critical mass of the African American student population, African American/Black Studies programs, and African American social integration on African American retention and achievement at PWCUs (Shingles, 1979; Sedlacek, 1987; Richardson & Skinner, 1991; Tinto, 1993; Soloranzo, Ceja, & Yosso, 2000; Williamson, 2000; Harvey, Harvey, & King, 2004; Seidman, 2005). These findings may be interpreted as showing that while one type of institutional action Black cultural centers, effect African American graduation rates, other types of action, including African American student enrollments and African American/Black Studies programs do not effect graduation.
Hypothesis 4

Hypothesis 4 predicted that controlling for other variables, *percentage African American students* would have a statistically significant positive effect on African American graduation rates. The variable *percentage African American students* yielded unexpected results, as it failed to predict African American graduation. The hypothesis that holding the effects of other variables constant the percentage of African American students will have a statistically significant positive effect on African American graduation rates was not supported.

Hypothesis 5

Hypothesis 5 predicted that controlling for other variables, *Black cultural center* would significantly affect African American graduation rate. The variable *Black cultural center* yielded expected results. The hypothesis that holding the effects of other variables constant, colleges and universities with a Black cultural center will be more likely than other colleges and universities to have significantly higher graduation rates was supported. These findings were consistent with the literature (Richardson & Skinner, 1991; Tinto, 1993; Williamson, 2000; Seidman, 2005). African American retention programs and organizations, including Black cultural centers emerged on PWCU campuses during the 1960s and 1970s as a way to address the negative experiences that African American students faced (Shingles, 1979; Feagin et al., 1996; Williamson, 2000; Foster, 2003; Hurtado, 2005; Hurtado, 2007; Harper and Hurtado, 2007). It appears that predominantly White colleges and universities with Black cultural centers provide a level of academic and social support, and social integration for African American students.
Americans that enhance their retention and graduation that colleges/universities without these cultural centers do not.

Hypothesis 6

Hypothesis 6 predicted that controlling for other variables, *African American/Black Studies* would significantly affect African American graduation rate. The variable *African American/Black Studies* yielded unexpected results, as it failed to significantly predict the African American graduation rate. The hypothesis that colleges and universities with an African American/Black Studies program will be more likely than other colleges and universities to have significantly higher graduation rates was not supported.

**Social and Demographic Controls**

The findings showed a relationship between African American graduation rates and several social and demographic controls. Specifically, the percentage of first-year retention rates was expected to significantly contribute to the predictability of the model (see Model 2 in Table 11). These findings are consistent with the literature on the positive effects of first-year retention programs on student retention and achievement in U.S. colleges/universities (Tinto, 1993; Pascarella & Terenzini, 1991; D'Augelli & Hershberger, 1993). Other social and demographic controls found to impact African American graduation rates are: public colleges/universities, those in DIV III athletic conference, the Midwest region, and in towns. Colleges and universities with higher numbers of student organizations and percentages of women enrolled had positive
effect on African American graduation rates. These findings are consistent with the literature on the benefits of social and demographic factors, including number of student organizations (Pascarella & Terenzini, 1991), percentage of women enrolled (Carey, 2008; KewalRamani, Gilbertson, Fox, & Provasnik, 2007) and DIV III athletic conference on minority and African American retention and achievement.

These findings may be interpreted as showing a relationship between African American graduation rates and the percentage of women enrollment in U.S. colleges and universities. KewalRamani et al. (2007) noted that in the last 30 years, undergraduate enrollments and completions for women have surpassed their male counterparts. Furthermore, the findings are consistent with the literature on student involvement (Pascarella & Terenzini, 1991) and retention in U.S. colleges and universities. Higher African American graduation rates at U.S. colleges/universities within the DIV III athletic conference as compared to colleges/universities within no athletic conference may be due to the fact that African American students at these Division III colleges/universities are able to focus more on student retention since these student athletes are less likely to be recruited or to play at the professional level. Furthermore, “Division III athletics features student-athletes who receive no financial aid related to their athletic ability and athletic departments are staffed and funded like any other department in the university. Division III athletics departments place special importance on the impact of athletics on the participants rather than on the spectators” ("NCAA, 2009, ¶ 3, Appendix C").
Discussion

Tinto (1993) argued that a student’s institutional experiences are affected by institutional action. Furthermore, he defines institutional actions as the ones a college/university takes to enhance student retention. This study emphasized institutional action initiatives for diversity, minority student retention, African American student retention and social integration on predominantly White campuses. Examining the effects of specific institutional attributes in U.S. colleges/universities on African American graduation rates, showed that institutional initiatives taken to enhance the retention/social integration of African Americans does affect their graduation rates.

These findings support the dimensions of Tinto’s theory of student departure and model that emphasizes the effects of institutional experiences and personal/normative integration on a student’s decision to leave the college/university. The dissertation study included dimensions of Tinto’s model that address the institutional traits of students’ level of involvement in the academic and social life of the campus (see chapter 2, p. 43). Primary focus is placed on examining the effects of these type traits/dimensions of Tinto’s model on African American retention and graduation. Eight of the predictors in the study had a significant effect on the African American graduation rate. Thus, showing some promise of the predictability of institutional traits in U.S. colleges and universities on African American graduation rates.

There are two primary implications to these findings. The findings have implications for consideration of adapting an institutional attributes dimension as a precursor to the institutional experiences (column 3) and personal/normative dimensions (column 4) dimensions of Tinto’s model of institutional departure.
Furthermore, the findings present a strong case for identifying and examining the dimensions of institutional experiences and personal/normative integration in Tinto’s current model at the college/university level. Second, the findings have implications for the use of Tinto’s theory and model in future research. The findings present a strong case for identifying indicators of institutional action such as diversity, minority group retention initiatives and racial minority groups, including African Americans and using the dimensions of institutional experiences and personal/normative integration in Tinto’s current model to continue to examine these attributes in U.S. colleges and universities at the college/university level.

Diversity and Minority Group Retention Initiatives

On one hand, these data appear to provide support for the assertions of Allen (1985) and Yancey (2008) that the integration of Black students into campus social life may not be a necessary pre-condition for academic success. And, those factors in PWCUs, which impact the retention and achievement of White students, may similarly impact the success of African Americans. On the other hand these data appear to provide support for the assertions of Harper and Hurtado (2007), Benton (2001), Solorzano et al. (2000), and Feagin et al. (1996) that U.S. colleges and universities fail to meet the educational needs of all students, specifically, those of African Americans and other racial minorities. Thus, another explanation for these inconsistent findings is that graduation rates are the result of several institutional factors and Whites creating an atmosphere where African Americans continue to feel alienated, isolated and marginalized.
Other possible explanations may be found in the assertions of Richardson and Skinner (1991), Levine (1993) and Bobo (2000). Richardson and Skinner (1991) argued African American graduation rates are the result of inconsistency in practices and resource allocations in U.S. colleges/universities. Colleges/universities implement minority recruitment and admission strategies without the compensatory organizational and monetary moderations needed to transform the cultural and structural environments at these institutions (1991). Levine (1993) claimed African Americans and racial minorities are highly underrepresented in their student bodies, and on their faculties, senior staffs, and boards of trustees. Furthermore, the curriculum largely has peripheralized and neglected diversity, which at PWCU's are lacking in intellectual depth, unconnected with the academic side of higher education and ignored by faculty. Another possible reason why colleges with institutional action initiatives of diversity, affirmative action and minority student retention initiatives did not have higher graduation rates than those without diversity and minority group retention initiatives is that the assertions of Bobo (2000) regarding affirmative action policies as a type of symbolic racism exists in PWCU's and thus, may impact African American retention and graduation.

Finally, while this study sets the ground work for future research on the effects of diversity, minority group and African American retention/social integration initiatives on African American and other racial/ethnic minority group (e.g. Hispanic American, American Indian, or all disadvantaged racial minorities) retention and graduation lacking in the research literature is a major undertaking of qualitative studies that primarily examine the scope of all forms of diversity initiatives, especially those that are minority
group specific (e.g. affirmative action, minority and African American student retention programs) in U.S. colleges and universities. These findings further suggest that the success of future research on African American and minority group retention and graduation will need to identify additional methods for collecting data on types of institutional action traits in U.S. colleges/universities that are diversity, minority group and African American specific. Furthermore, research studies that examine the scope of existing diversity, minority and African American retention programs at U.S. colleges and universities are needed.

Directors of diversity and affirmative action/equal opportunity reflect a level of institutional support for diversity initiatives within the organizational structure. The data collected for these variables were from national directories that are widely used by students, faculty and administrators demonstrate some commitment to diversity, minority group and African American retention initiatives. However, what is not known is the depth and/or level of commitment of these colleges/universities and the scope of specific diversity initiatives on PWCU campuses. In addition to whether or not a college/university had a director of diversity, these findings may have been inconsistent due to the lack additional data on the description of the position, the college’s/university’s mission or institutional commitment to affirmative action, the role of the director to the mission of the institution’s diversity goals, and the extent of these responsibilities for African American student retention and graduation may have yielded different results (Sedlacek, 1987 &1999; Richardson & Skinner, 1991; Tinto, 1993, Seidman, 2005). Furthermore, whether or not a college/university had a director of affirmative action/equal opportunity, additional data on the description of the position,
the college’s/university’s mission or institutional commitment to affirmative action, the role of the director to the mission of the institution’s affirmative action goals, and the extent of these responsibilities for African American student retention and graduation may have yielded different results (Sedlacek, 1987 & 1999; Richardson & Skinner, 1991; Tinto, 1993; Seidman, 2005).

_African American Retention/Social Integration_

The inconsistency of these findings may best be explained by the lack of an existing data source or sources, which include specifics on the various facets of diversity and affirmative action policies and practices; minority student retention services and programs; and African American student organizations for the 1,075 or more U.S. colleges/universities included in this study. These data findings appear to provide support for the assertions of Tinto (1993), Hurtado (2005) and Seidman (2005) that the integration of African American students into the academic and social communities of campus life impacts their retention and graduation. In addition to whether or not a college/university had an African American/Black Studies program on campus, additional data on the description of the position; the role of the dean or director of the program to the mission of the college/university; the number of faculty in the program; and the extent of these responsibilities to African American student retention may have yielded different results (Sedlacek, 1987 & 1999; Richardson & Skinner, 1991; Tinto, 1993; Seidman, 2005).

In summary, all three diversity and minority group retention initiative, and two of the African American retention/social integration variables yielded unexpected results as
they failed to predict African American graduation. However, the results of this study reveal that colleges with Black cultural centers had higher African American graduation rates than colleges/universities without these cultural centers. These findings appear to show that institutional action, including diversity, affirmative action/equal opportunity and minority group retention initiatives have no effect on African American graduation. However, possible explanations for these unexpected findings are seen in the research literature on minority and African American retention and achievement by Levine (1993) who found that diverse populations are highly underrepresented in the student bodies and on the faculties, senior staffs, and boards of trustees at PWCUs. Other explanations include assertions that as U.S. colleges and universities seek to increase cultural diversity on campus, they do so without fully committing to the cultural, organizational and economic transformations needed to positively affect the campus environment or to impact the retention and achievement of African American and other racial minority groups (Lang, 1992; Richardson & Skinner, 1991; Shingles, 1979). For the most part diversity, minority and African American retention initiatives appear to be more of a symbolic gesture rather than a strategic goal of the college/university.

Strengths and Limitations

A major strength of the study is that the dataset included data not previously collected on diversity, affirmative action, minority group and African American retention/social integration traits in U.S. colleges and universities. Data collected on colleges/universities were institutional rather than individual. The findings for the study are generalizable and can be replicated. However, additional studies are needed to
further investigate the predictability of social, demographic and institutional action factors on African American retention and achievement. These research findings have implications for future qualitative studies on diversity initiatives and minority retention programs at PWCUS. Data sources used for the study was limited to information reported to the U.S. Department of Education and three credible and nationally circulated directories. Future qualitative studies of these types of diversity, minority group, and African American retention and social integration initiatives could examine the entire spectrum of African American and minority group retention initiatives and programs as types of institutional action in U.S. colleges.

While the current study was able to produce findings on African American graduation rates from a national sample of U.S. colleges and universities, to further understand the effects of these types of institutional action on graduation for African Americans and other racial minorities qualitative studies examining the scope of various diversity, minority group and African American retention initiatives are needed. These future studies need to address the link between diversity and the mission of the college/university, resource allocations for, number of staff, program offerings, services and size of student community served. Exploratory studies of these types of diversity, minority group, and African American retention and social integration initiatives will produce useful data on U.S. colleges/universities, and contribute to an existing gap in the research literature.

Finally, comparative studies examining the extent of institutional action at PWCU's and HBCUs and their effects on African American retention and graduation are scarce. Future studies examining the effects of institutional action traits in U.S.
colleges/universities on retention and graduation for all disadvantaged racial minorities are needed.

Contributions

This study addressed an existing gap in the research literature on minority and African American student retention and achievement. The research model used for the study included variables measured explicitly at the college/university level to examine the effects of institutional action, social, and demographic traits on African American graduation. Data collected for this research included a database of institutional characteristics for over 2,000 U.S. colleges and universities. Institutional characteristics were diversity, minority and African American student retention programs and initiatives in U.S colleges and universities. A data set of this nature is currently nonexistent.

Empirical research on how the interplay between cognitive and noncognitive factors effect African American and minority group retention and achievement is lacking. This dissertation contributes to that gap by examining the effects of institutional factors on African American graduation. The findings can be used to further investigate the effects of the dynamic interplay between individual and institutional factors on African American and minority retention and achievement. Lastly, this study puts forth a strong case for consideration of an additional dimension- institutional attributes to Tinto’s model of institutional departure.

Conclusions

In summary, there does appear to be a relationship between African American graduation rates in U.S. colleges and universities and institutional action factors.
Furthermore, Black cultural centers as a type of African American retention and social integration initiatives at predominantly White colleges/universities (PWCUs) show promise for predicting African American graduation rates. Social and demographic factors, that showed promise for predicting graduation included: percentage of first-year retention rates, public colleges/universities, percentages of women enrolled, the numbers of student organizations on campus, and Division III athletic conference colleges/universities, the Midwest region and town of a college/university.
NOTES


4. The acronyms, *PWCU* (predominantly White colleges and universities) and *PWI* (predominantly White institutions) are widely used in the research literature on minority and African American student retention and achievement to depict higher education institutions with predominantly White populations of student, faculty and staff. The term *PWCU* is used throughout the dissertation except when citing research in which the term *PWI* was used in the original study.


7. Data was collected from the NCES Integrated Postsecondary Education Data System (IPEDS).


9. Positions in the 2008 Higher Education Directory were coded as:
   (22) Director, Affirmative Action/Equal Opportunity – Responsible for the institution’s programs relating to affirmative action and equal opportunity;
   (28) Director of Diversity – Responsible for the institution’s program relating to diversity; Dean or Director – Serves as the principal administrator for the institutional program indicated: (93) Minority Students and (88) Use this code for those titles that do not fit the above positions. Some positions for diversity and minority students were coded under code (88).
APPENDIX A

DEFINITION OF TERMS
Achievement: educational attainment as measured by completion of an undergraduate degree.

Affirmative Action Programs (also called Affirmative Action/Equal Opportunity): private and governmental policies and programs that seek to improve the economic opportunities for formerly excluded groups, such as racial, ethnic and gender groups and encourage qualified minority group members to become a part of the pool of applicants for openings and opportunities (McLemore & Romo, 2005).

African Americans: a race and ethnic group also called a minority group or subordinate group, whose members are persons of African descent born in the U.S. The term African American is used throughout the dissertation except when citing research in which the term Black was used in the original study.

Diversity: systematic blending of academic programs, recruitment, retention, policies, and curriculum that provide college students with an enriched multicultural environment for learning (Ervin, 2001).

Graduation: completion of an undergraduate degree.

Institutional departure: departure of persons from individual institutions in the scope and patterning of student departure (Tinto, 1993).

Minority retention programs: programs, organizations and services established to provide academic and social support to African American and other racial minority groups and increase recruitment and retention on campus.

Multiculturalism (also referred to as multicultural education): the promotion of cultural diversity, race and ethnic awareness and a respect for group similarities and differences (Ervin, 2001).
Racial minority group: African American, Native American and Hispanic American (Latino) minority groups identified primarily by physical characteristics such as skin color (Healey, 2009).

Retention: the successful matriculation of students from the first year to the next, through to graduation.

Student dropout: a type of leaving behavior where the student and the institution defines the behavior as a form of failure and warrants institutional action (Tinto, 1993). “Insofar as dropout is defined as a failure on the part of the individual to obtain a desired and reasonable educational goal, so too does that leaving represent a failure on the part of the institution to assist the person achieve what he/she initially set out to do in first entering the institution” (Tinto, 1993, p.143).
APPENDIX B

REPRINT OF VINCENT TINTO’S TABLE 1 OF CONSTRUCT VARIABLES, INDICATORS AND MEASUREMENTS
<table>
<thead>
<tr>
<th>Construct</th>
<th>Indicator and measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Background</td>
<td>Socioeconomic status (1=lowest, 4=highest), preference of parents on respondent’s high school plans (1=college minimum, 4=college degree), regional location of high school (nominal scale: 1=rural, 3=urban).</td>
</tr>
<tr>
<td>Skills and Abilities</td>
<td>Math and language abilities (composite test scores), self-concept (composite scores), and locus of control (composite scores).</td>
</tr>
<tr>
<td>Prior Schooling</td>
<td>Self reported high school GPA (1=F, 8=A), high school program (1=vocational, 3=academic).</td>
</tr>
<tr>
<td>Intentions (T1)</td>
<td>Postsecondary aspirations (1=no college, 3=graduated degree), occupational aspirations (1=requires no college degree, 3=requires advanced degree).</td>
</tr>
<tr>
<td>Goal Commitment (T1)</td>
<td>Self reported ability to finish college (1=definitely not, 5=definitely yes).</td>
</tr>
<tr>
<td>Institutional Commitment (T1)</td>
<td>Lowest level of education satisfied with (1=no high school degree, 5=professional degree).</td>
</tr>
<tr>
<td>Formal Academic Integration</td>
<td>Satisfaction with: intellect growth, quality of teachers, and quality of instruction (1=not very satisfied, 5=very satisfied), self reported college GPA.</td>
</tr>
<tr>
<td>Informal Academic Integration</td>
<td>Satisfaction with: buildings, library, etc, and intellectual life on campus (1=not very satisfied, 5=very satisfied)</td>
</tr>
<tr>
<td>Formal Social Integration</td>
<td>Satisfaction with: sports and recreational facilities and cultural activities (1=not very satisfied, 5=very satisfied)</td>
</tr>
<tr>
<td>Informal Social Integration</td>
<td>Satisfaction with intellectual life on campus (1=not very satisfied, 5=very satisfied)</td>
</tr>
<tr>
<td>Intentions (T2)</td>
<td>Postsecondary aspirations (1=no college, 3=graduated degree), occupational aspirations (1=requires no college degree, 3=requires advanced degree).</td>
</tr>
<tr>
<td>Goal Commitment (T2)</td>
<td>Self reported ability to finish college (1=definitely not, 5=definitely yes).</td>
</tr>
<tr>
<td>Institutional Commitment (T2)</td>
<td>Satisfied with prestige of school (1=not very satisfied, 5=very satisfied)</td>
</tr>
<tr>
<td>Postsecondary Outcome</td>
<td>Educational attainment (1=No postsecondary degree, 2=postsecondary degree)</td>
</tr>
</tbody>
</table>
APPENDIX C

NATIONAL COLLEGIATE ATHLETIC ASSOCIATION (NCAA) WEBSITE LINK ON DIFFERENCES BETWEEN DIVISIONS I, II AND III
What's the difference between Divisions I, II and III?

Division I
Division I member institutions have to sponsor at least seven sports for men and seven for women (or six for men and eight for women) with two team sports for each gender. Each playing season has to be represented by each gender as well. There are contest and participant minimums for each sport, as well as scheduling criteria. For sports other than football and basketball, Division I schools must play 100 percent of the minimum number of contests against Division I opponents -- anything over the minimum number of games has to be 50 percent Division I. Men's and women's basketball teams have to play all but two games against Division I teams; for men, they must play one-third of all their contests in the home arena. Schools that have football are classified as Football Bowl Subdivision (formerly Division I-A) or NCAA Football Championship Subdivision (formerly Division I-AA). Football Bowl Subdivision schools are usually fairly elaborate programs. Football Bowl Subdivision teams have to meet minimum attendance requirements (average 15,000 people in actual or paid attendance per home game), which must be met once in a rolling two-year period. NCAA Football Championship Subdivision teams do not need to meet minimum attendance requirements. Division I schools must meet minimum financial aid awards for their athletics program, and there are maximum financial aid awards for each sport that a Division I school cannot exceed.

Division II
Division II institutions have to sponsor at least five sports for men and five for women, (or four for men and six for women), with two team sports for each gender, and each playing season represented by each gender. There are contest and participant minimums for each sport, as well as scheduling criteria -- football and men's and women's basketball teams must play at least 50 percent of their games against Division II or Football Bowl Subdivision (formerly Division I-A) or Football Championship Subdivision (formerly Division I-AA) opponents. For sports other than football and basketball there are no scheduling requirements. There are not attendance requirements for football, or arena game requirements for basketball. There are maximum financial aid awards for each sport that a Division II school must not exceed.
Division II teams usually feature a number of local or in-state student-athletes. Many Division II student-athletes pay for school through a combination of scholarship money, grants, student loans and employment earnings. Division II athletics programs are financed in the institution's budget like other academic departments on campus. Traditional rivalries with regional institutions dominate schedules of many Division II athletics programs.

Division III

Division III institutions have to sponsor at least five sports for men and five for women, with two team sports for each gender, and each playing season represented by each gender. There are minimum contest and participant minimums for each sport. Division III athletics features student-athletes who receive no financial aid related to their athletic ability and athletic departments are staffed and funded like any other department in the university. Division III athletics departments place special importance on the impact of athletics on the participants rather than on the spectators. The student-athlete's experience is of paramount concern. Division III athletics encourages participation by maximizing the number and variety of athletics opportunities available to students, placing primary emphasis on regional in-season and conference competition.

Retrieved September 9, 2009 at 4:15 p.m.

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