An Examination of Factors Influencing Collegiate Social Integration of African American Students at a Predominantly White Institution

by

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Abstract

There is a lack of research addressing social integration of African American students at predominantly White institutions (PWIs). Evidence has indicated that the college experience for African American students at historically Black colleges and universities (HBCUs) when compared with that of their African American peers attending a PWI is more positive in a numbers of ways. In this study, social integration ranks as the primary agent in assessing and defining the quality of education among underrepresented college students. The study will include several entities, such as campus climate and programs that bound with social integration and retention of underrepresented students in higher education. The purpose of this study was to assess the need for social integration of African American students at PWIs. The factors that will influence social integration will be examined by race, gender, campus climate, campus services, and faculty. The study was designed to gain a better understanding of how African American students socially integrate at PWIs. The subjects of this study are 1,037 full-time African American students who attended 4-year institutions during 2006. The sample was drawn from 117 four-year colleges. The institutions represented are from all regions of the United States, including urban, suburban, and rural settings. This is a quantitative study utilizing the data collected from a 28 question survey entitled *Your First College Year*, developed and conducted by the Higher Education Research Institute (HERI) at the University of California, Los Angeles and the Policy Center on the First Year of College at Brevard College. This survey was designed in early 1999 to measure students' curricular and co-curricular experiences since

entering college and to be administered at the end of the first year. This survey was also designed to post-test several items from the Cooperative Institutional Research Program (CIRP) Freshman Survey to encourage longitudinal assessment of first-year students. Your First College Year had one dependent variable and five independent variables. The dependent variable was social integration has a Cronbach's alpha $\alpha = 0.83$. The independent variables satisfaction has a Cronbach's alpha $\alpha = .85$, campus climate has a Cronbach's alpha $\alpha = .79$, student services has a Cronbach's alpha $\alpha = .53$, and faculty has a Cronbach's alpha $\alpha = .72$. Reliability involves consistency in measurement, but does not imply validity. The results of the study found that African American students can socially integrate at a PWI with the help of student services, faculty, and the climate of the campus.

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List of Abbreviations

CIRP   Cooperative Institutional Research Program

HERI   Higher Education Research Institute

HBCU   Historically Black Colleges and Universities

PWI   Predominantly White Institutions

YFCY   Your First College Year

Chapter 1

Introduction

The desegregation of public schools with the landmark Brown vs. Board of Education (1954) decision granted African Americans the right to enroll in white public schools and white institutions of higher education (Arminio, Carter, Jones, Kruger, Lucas, Washington, Young, & Scott, 2000). The goal of integration appeared to bestow equal opportunity to African Americans to further their education. By desegregating predominantly White institutions (PWIs), it was suggested that African Americans would begin to matriculate and graduate from PWIs at the same or greater rate that they had achieved at historically Black colleges and universities (HBCUs) (Arminio, Carter, Jones, Kruger, Lucas, Washington, Young, & Scott, 2000). Prior to Brown vs. Board of Education, HBCUs housed the majority of African American students, and by 1973, three-fourths of African American students attended PWIs. Despite the increased enrollment of African Americans at PWIs, HBCUs still graduated a disproportionate number of African American students in comparison to PWIs (Allen, 1992; Easley, 1993).

The experiences of African American students at postsecondary institutions have received considerable attention in the higher education literature throughout the past 20 years. Several researchers have compared various dimensions of the undergraduate experience at HBCUs to the African American student experience at PWIs (Allen, 1986; Bohr, Pascarella, Nora, & Terenzini, 1995; Cheatham, Slaney, & Coleman, 1990; Cokley, 1999; DeSousa & Kuh, 1996; Fleming, 1984; Flowers & Pascarella, 1999; Watson & Kuh, 1996). These comparative

studies overwhelmingly indicate that HBCUs, in spite of their poorer financial resources, offer healthier learning environments and support outlets for African American undergraduates, thus more positively affecting African American student outcomes.

Comparative studies with HBCUs and PWIs have added a much needed credibility and legitimacy to historically Black institutions during an era of forced desegregation and doubt regarding their continued existence. According to Harper, Carini, Bridges, and Hayak (2004), most of the recently published research has neglected to consider exclusively the impact and effectiveness of HBCUs in serving African American students. Analysis involving the study of HBCUs throughout the past two decades has mostly occurred at the expense of comparing those institutions to PWIs. Consequently, engagement trends and student outcomes on HBCU campuses alone has not been sufficiently provided in the current higher education literature. Little is known about how HBCU students spend their time and to what extent are actively engaged in educationally purposeful activities (Harper, Carini, Bridges, & Hayak, 2004).

Tinto (1993) noted that African American students face unique challenges to becoming academically and socially integrated into PWIs because their norms and values may be incongruent with those of the White majority. Because research has indicated that African American students are often less academically prepared than their White peers (Guiffrida, 2003), early retention strategies focused primarily on assisting minority students in becoming academically integrated at PWIs. Tinto (1993) noted that social integration influences persistence decisions for African American students as much as it does for White students. Incongruence with social norms often makes it more difficult for African Americans at PWIs to find and become a member of a supportive community within the college. Research indicates

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that African American students who do not establish a compassionate population at PWIs often experience feelings of discomfort, social isolation, and stress, which can lead to student attrition (Feagin, Vera, & Imani, 1996; Gossett, Cuyjet, & Cockriel, 1998; Lang & Ford, 1992; Ponterotto, 1990; Sailes, 1993).

Social integration has a more influential role in predicting student persistence than academic integration (Milem & Berger, 1997). Thus, social support appears to be a major determinant of both students' satisfaction with college and their persistence. Research has consistently highlighted the important role that strong, supportive campus interpersonal relationships play in African American students' functioning (D'Augelli & Hershberger, 1993; Fleming, 1984; Hershburger & D'Augelli, 1992; Jay & D'Augelli, 1991).

Diversity initiatives have increased throughout higher education institutions in the past few years. More higher education institutions are embracing diversity in the curriculum and in the university as a whole. Educators have been attempting to grasp with the new reality of the need for diversity, with mixed results. The accrediting agents for higher education recognize that diversity is a complex concept and that there are many facets to it. SACS and other accrediting agencies expect accredited institutions to demonstrate commitment in support of diversity in the education experience (Misra & McMahon, 2006).

Statement of the Problem

There is a lack of research addressing social integration of African American students at PWIs. Evidence has indicated that the college experience for African American students at HBCUs when compared with that of their African American peers attending a PWI is more positive in a numbers of ways (Pascarella & Terenzini, 1991). Because of these differences, only a few studies sought to pinpoint what makes the HBCU experience better for African American

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students than the experience at a PWI. For African American students, HBCUs appear to provide greater satisfaction, social support, and faculty support, as well as fewer racist incidents and sentiments (Allen, 1987; Allen, Epps & Haniff, 1991; Nettles, Theony, & Gosman, 1986; Pascarella & Terenzini, 1991). Fleming (1984) states that students at HBCUs are more engaged, better adjusted, and more committed to college life. African American students at HBCUs have also been found to be more integrated into campus life, perceive their college as providing more institutional support (Davis, 1994), and report higher levels of social involvement and more favorable relationships with professors (Allen, 1992). The HBCU experience is said to offer more untiring, more congruent mentoring, more appropriate remediation, more cultural and extra-curricular activities, a better social life, and less racial harassment whether institutional or from peers (Cross, 1994).

Purpose of the Study

In this study, social integration ranks as the primary agent in assessing and defining the quality of education among underrepresented college students. The study will include several entities, such as campus climate and programs that bound with social integration and retention of underrepresented students in higher education.

The purpose of this study was to assess the need for social integration of African American students at PWIs. The factors that will influence social integration will be examined by race, gender, climate, satisfaction, campus services, faculty, and institution type. The study was designed to gain a better understanding of how African American students socially integrate at PWIs. Specifically, this study is meant to figure out how the African American students are able to socially integrate with white students at their institution. The data to be analyzed in the study were collected from freshmen at colleges and universities across the United States, using

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responses from Your First College Year Survey (YFCY) of the Cooperative Institutional

Research Program (CIRP).

Research Questions

The following research questions were used in this study:

1. What factors, related to satisfaction, affect students' social integration within the institution?

2. What factors, related to campus climate, affect students' social integration?

3. How does gender affect students' social integration within the institution?

4. What factors, related to student services, affect students' social integration?

5. What factors, related to faculty, affect students' social integration?

Significance of the Study

An important factor which affects college students' persistence is that of being socially integrated and connected with others, especially other students. College is not only a time of academic pursuits but also an opportunity to explore or enhance themselves as social beings (Moxley, Najor-Durack, & Dumbrigue, 2001). This study will examine how African American students socially integrate at predominantly white institutions. African American students are the largest minority group at most predominantly white institutions in the U.S. Most minority students at these institutions tend to find outlets that are similar to them culturally or spiritually. Findings from this study will have significant implications for the areas of administration, student affairs, and research. This study should assist Student Affairs officials and the Student Government Association in identifying programs that will assist students integrating socially at their institution.

Limitations

This study has the following limitations:

1. The participants in the survey were African American students from PWIs therefore; the results will not represent any other race or ethnic group.

2. The research instrument used to collect data was a quantitative survey, which limits the responses of the participants.

3. Participants' opinions and feelings are not assessed in depth using quantitative surveys (Cohen & Manion, 1996).

4. This study utilized secondary data from a larger study that was not primarily designed for the purposes of this study, therefore are a number of constructs that were not included in this study initiates limitations of the study.

5. Only questions that relate to campus climate, faculty, satisfaction, and student services were utilized. For that reason, only using this information from the study limits the results of the study and excludes very useful data.

Assumptions

The following assumptions were made in regard to this study:

1. The participants answered the Your First College Year survey honestly and accurately.

2. The characteristics of the students will vary since there is a variation in backgrounds, social economic status, and gender.

Definitions of Terms

The following terms are used in this study:

1. Affirmative Action - Positive steps taken to increase the representation of women and minorities in areas of employment, education, and business from which they have

been historically excluded. Receiving preferential treatment or selecting a person based on race, gender, or ethnicity. (http://plato.stanford.edu/entries/affirmative-action/)

2. Attrition - refers to students who fail to reenroll at an institution in consecutive semesters.

3. Attrition Rate -   Attrition rates provide a measure of the proportion of students who "drop out" of an award course at an institution each year. Attrition rates are one of a range of indicators of outcomes used to measure performance of institutions in the higher education sector.

4. CIRP - The Cooperative Institutional Research Program (CIRP) maintains the CIRP Freshman Survey and follow up assessments such as the Your First College Year (YFCY) and the College Senior Survey.

5. HERI – The Higher Education Research Institute informs educational policy and promotes institutional improvement through an increased understanding of higher education and the impact on college students.

6. HBCUs – Historically Black Colleges & Universities

7. Institutional Selectivity – The average or median score of entering or enrolled students on standardized test such as ACT, SAT, or equivalent.

8. PWIs – Predominantly White Institutions

9. Retention – Tracks the full-time student in a degree program over time to determine whether the student has completed the program.

10. Social Integration – the process of combining a group of persons like minority groups, ethnic minorities, refugees, underprivileged sections of the society, to

integrate into the mainstream of the society, and thus to avail of the opportunities, rights and services available to the members of the mainstream of the society. Social integration is one of a constellation of "social" terms that is being used widely in contemporary policy development to describe concepts whose aim is to foster societies that are stable, safe, just and tolerant, and respect diversity, equality of opportunity and participation of all people. Other terms that often invoked in support of this goal are "social inclusion", "social cohesion" and "social capital" (Jeannotte, 2008).

Organization of Study

The study is organized into five chapters. Chapter 1 discusses the background related to the topic, statement of the problem, purpose of the study, research questions, significance of study, limitations, assumptions, and definitions of terms. Chapter 2 investigates the literature related to social integration among African American students. Chapter 3 identifies the research methods used in the study, including instrumentation, data collection, and analysis. Chapter 4 explains the results of the study. Chapter 5 discusses the results and provides implications for future research.

Chapter 2

Review of Literature

Social Integration

The purpose of integration has traditionally been to ensure there is racial diversity at an institution. However, contemporary advocates of diversity now define it as including differences of age, gender, sexual orientation, and physical disability (Ruffins, 1999). Integration was a concept critical to the civil rights victories that began transforming our society a couple of decades ago (Ruffins, 1999). Each institution has their own definition of integration and whether the institution is successful at integrating their campuses or not is based upon their definition. Academic and social integration have been examined in numerous studies of college persistence for resident students at four-year institutions (Pascarella, 1980; Pascarella, Smart, & Ethington, 1986; Pascarella & Terenzini, 1979, 1980) and for nontraditional students attending two-year institutions (Nora, 1987; Nora, Attinasi, & Matonak, 1990; Nora & Rendon, 1990). Nora (1993) defined social integration as follows:

> Social Integration: The development of a strong affiliation with the college social environment both in the classroom and outside of class includes interactions with faculty, academic staff, and peers but of a social nature (e.g., peer group interactions, informal contact with faculty, and involvement in organizations). (p. 237)

African American students have been underrepresented as a proportion of the total enrollment of students at institutions of higher education in the United States. Prior to the 1960s,

African Americans participated in higher education primarily at institutions known as Historically Black Colleges and Universities (HBCUs) (Blackburn, Gamson, & Peterson, 1978; Fleming, 1984; Willie & Cunigen, 1981). By the end of the 1960s, the majority of African American students enrolled at institutions of higher education were attending predominantly white institutions (PWIs) (Fleming, 1984; Willie & Cunigen, 1981). By the late 1990s, most African American students continued to attend institutions of higher education where the racial/ethnic composition of the students, faculty, and staff was predominantly white. Also, most U. S. College and university students, including African Americans, are enrolled at public institutions that are controlled at some level by government and receive some financial assistance in that state (Carter & Wilson, 1997; National Center for Education and Statistics, 1995).

Tinto (1993) advocates that an individual's own perception of their social and academic integration are the predominant influences on their decision to stay or leave higher education. Academic integration includes academic performance, self-perceptions, academic progress and belief that professors are personally committed to teaching and supporting students. Social integration includes self-esteem and the quality of relationships established with teaching staff and peers. Academic and social dimensions of higher education are important (Yorke, 2000). Yorke (1999) has suggested that the impact of external factors in shaping student experience needs greater emphasis in the student departure model. In addition, Brunsden, et al. (2000) imply a model concerned with establishing levels of integration should allow individual students to express personal meaning with respect to facets of experience associated with their integration. It is clear that the interplay of facets of academic and social integration is likely to be different for full-time, part-time, traditional and non-traditional students (Rhodes & Nevill, 2004).

Tinto (1975) proposed, that college students are more likely to withdraw if they are insufficiently integrated or if they maintain values sufficiently different from the values of the college they are attending. Tinto (1975) developed these propositions into a complex explanation of commitment, academic and social integration, and college persistence, proposing that students' levels of commitment to the goal of completing college and to their specific institution ultimately determine integration and the dropout decision. Tinto (1975) contends that initially students' background characteristics influence commitment, but after matriculation, the individual's experiences with the social and academic facets of an institution through participation in extracurricular activities, interactions with other students, and interactions with faculty develops a strong commitment to attaining a college degree. Students with strong commitments and intentions on these areas will be the most likely to persist in college, and those with weak commitments will be the most likely to withdraw (Christie & Dinham, 1991).

A variety of academic programs have been empirically found to contribute appreciably to the academic and social integration of students, including curricular, classroom, and residential learning communities (Lenning & Ebbers, 1999; Zhao & Kuh, 2004); freshman seminar/orientation courses (Barefoot & Fidler, 1996); and multiple residence life factors (Ware & Miller, 1997). Learning communities have been shown to instill a sense of involvement and satisfaction in the institution (Andrade, 2007; Tinto, 1987). Freshman seminar/extended orientation courses and residence life factors have also been shown to have a positive impact on student success and retention (Barefoot & Fidler, 1996; Ware & Miller, 1997), given that these programs help students establish academic and social support networks while laying out the expectations of the institution (Price, 2005). These networks have seen increased support in the last few decades as a means to "forge closer bonds between students, among students and

faculty, and between students and the institution" (Price, 2005, p. 3). Although Zhao and Kuh (2004) advocate the use of learning communities in the first two years of college, they contend that other pedagogical practices that directly involve faculty participation such as service learning "may well have similar positive effects, if implemented appropriately" (p. 132).

First generation student's academic and social integration into the new environment of the university are crucial to their persistence and success in college (Nora, 1987; Nora & Rendon, 1990). Strong predictors of integration into college environment include formal and informal faculty-student interactions, which have been shown to significantly influence student retention and academic achievement (Nora & Rendon, 1990; Pascarella & Terenzini, 1979, 1980). One study identified relationships with faculty and peers as being among the five major keys of academic and social integration (Strage, 1999). Academic integration is achieved by means of more formal interactions with faculty, staff, and peers that are often related to educational concerns and academic content. Social integration is achieved through strong affiliations within the college social environment, including less formal interaction between first-generation students and their faculty whether formal or informal is crucial to their academic success and retention.

<div align="center">Campus Climate</div>

The concepts of sense of belongings and satisfaction have been included in several models of college student persistence and retention; specifically, the concept of sense of belonging is associated with Tinto's concept of integration into the college setting (Tinto, 1993); Milem and Berger (1997) theory of student involvement; and Bean's (1985) concepts of socialization, which are closely related to students' institutional fit and commitment. Research conducted on college student experience and sense of belonging suggests there is a strong

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relationship between belonging and student persistence and ultimately student retention and graduation (Alford, 1998; Tovar, Simon, & Lee, 2009). The greater the sense of belonging to the institution, the more likely the student will remain in college (Hausmann, Schofield, & Woods, 2007; Hoffman, Richmond, Morrow, & Salomone, 2002-2003). Much of this recent work expands on the pioneering work of Astin (1993) and Tinto (1993).

Hurtado and Carter (1997) noted that sense of belonging is a separate construct from one's level of involvement in the community. Perceptions of hostile campus racial climate negatively affected Latino students' sense of belonging (Hurtado & Ponjuan, 2005). Johnson, et al. (2007) conducted a study built on the work of Hurtado (1994) and others and found that African American, Hispanic/Latino, and Asian Pacific American students reported a lesser sense of belonging than Caucasian students. Specific studies involving African American student populations also found that racial climate can impact student engagement and sense of belonging (Chavous, 2005; Harper, Carini, Bridges, & Hayek, 2004).

Many scholars believe that campus climate when referring to diversity has an indirect effect on student persistence (Pascarella & Terenzini, 2005); for example, Museus, Nichols, and Lambert (2008) found that campus climate affected students' goal commitment, social involvement, academic involvement, and institutional commitment. Based on their review of the literature, Pascarella and Terenzini (2005) concluded that at certain institutions, "the effects of campus climate may be more indirect than direct, influenced by more supportive faculty and peer relations and overall educational environment" (p. 438). Perceptions of negative feelings of belonging are not limited to issues of race/ethnicity. Ostrove and Long (2007) discovered that social class impacts students' sense of belonging and was marginally related to academic performance. Stebleton, Huesman, and Kuzhabekova (2010) concluded that immigrant status

(e.g. recent immigrant status and second generation vs. non-immigrant) makes a difference in how students perceive sense of belonging and satisfaction.

Gains in academic and intellectual development are expected to exert a positive influence on three major student outcomes: academic performance during the first year, commitment to the institution in which they are enrolled, and commitment to the attainment of an undergraduate degree (Tinto, 1987; Tinto, 1997). If these outcomes are achieved during the first year in college, students are more likely to continue attending their institutions (Tinto, 1987, 1997). Based on theoretical frameworks by Tinto (1987, 1993) and Bean and Metzner (1985), the model further presupposes that academic and social experiences are interdependent: positive experiences in one domain are conducive to positive experiences in the other. Support for this interrelationship is provided by Stage (1989), Cabrera, Castaneda, Nora, and Hengstler (1992), and Cabrera, Nora, and Castaneda (1993).

The positive impact of a supportive context on the academic success of African American students at HBCUs has been described by others (Anderson & Hrabowski, 1977; Fleming, 1981a, 1981b, 1984, 1990; Jordan-Cox, 1987). At PWIs, problems of cultural adjustment, isolation from other African Americans, and problems of racism compromise the academic careers of African American undergraduates (Allen, 1988). However, the complex factors in these settings that have a measureable impact on African American students' academic lives are not clear (Allen, 1985; Guloyan, 1986; Gunnings, 1982; Hershberger & D'Augelli, 1992; Jay & D'Augelli, 1991). African American students must make significant personal, family, and social adjustments to attend predominantly white institutions, especially if the campus is geographically distant from their homes. Many come from communities and high schools in which they were in the majority; however, on the college campus, they are a distinct minority. Additional are

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confronted and must deal with racism on campus (D'Augelli & Hershberger, 1993). Ehrich's

(1990) report on campus hate crimes found extensive reports of discrimination, most of which

were verbal; even if most African American students had not experienced harassment

themselves, they knew of others' harassment on campus. Thus, African American students'

personal experience with racism on campus and their perceptions of the campus environment can

be viewed as mediating the relationship between their academic potential and their performance

(Mallinckrodt, 1988). Certainly, some have argued that precollege academic preparation and the

negative environments found on some campuses are the most powerful factors influencing higher

educational achievement in African American youth (Mannan, Charleston, & Saghafi, 1986).

Bush and Bush (2010) stated that precollege preparation is a very important factor that influence

African American students. The factors that are considered are high school grade point average,

placement test score social integration, and student's self-concept.

The premature departure of students from postsecondary institutions has been

characterized as a puzzle (Braxton, Sullivan, & Johnson, 1997). Braxton, Sullivan, and Johnson

(1997) argue that, given the enormous amount of time and effort invested in the college selection

process, it is puzzling that nearly half of students entering two-year colleges and more than one-

fourth of students entering four-year colleges or universities depart these institutions by the end

of their first year. The puzzle of college student departure is further complicated when

considering the rates of departure for ethnic minority students. In both two-year and four-year

postsecondary institutions, premature departure in consistently higher for ethnic minority

students than for their White counterparts (Tinto, 1993). Bean (2000) solidified that minority

students at four-year institutions depart more often than white students.

Retention

Retention History

Predicting what student will stay in college is a challenge. Astin (1993) and Tinto (1987) contended that institutional relationships between the college or university and the students are critical to retention. Further, both considered that a variety of concerns and issues join to influence the decision of a student to stay in school. Clearly, students who make the decision to stay in college beyond the first year are much more likely to graduate. Astin (1993), in particular, noted the importance of racial homogeneity in the retention of minority students as well as women. Astin (1975) reported that minority students and women were both more likely to become involved and to flourish in institutions which responded to and supported their concerns, specifically historically black institutions and women's colleges (Schwartz & Washington, 1999). Student retention has been identified for decades as an important measure of institutional effectiveness, because retention and the student enrollments they represent can be translated into revenue, whether from full-time employment reimbursements or tuition and fees (Wild & Ebbers, 2002). Institutions are increasingly held accountable for retention rates, as well as by policy makers, business leaders, consumer advocates, parents, and students. Despite increasing demands for accountability, relatively little research has been conducted on community college retention. Most research on student retention has consisted of single institution studies that pertain to residential baccalaureate institutions (Henningsen, 2003; Pascarella and Terenzini, 1991).

Retention is the ability of a particular college or university to successfully graduate the students who initially enroll at that institution. The number and types of campuses that comprise the loosely coupled system of higher education in America has changed over time as well,

resulting in a diversified contemporary collection of campuses that is composed of more than

3,600 institutions. The types of students served by colleges and universities in the country have

changed over time, moving from a small selective, generally homogenous group of privileged

individuals to a diverse spectrum of individuals numbering in the millions. As the student

population has grown and diversified, so have retention issues (Berger & Lyon, 2005).

The larger social, economic, and political contexts in which higher education is

embedded have also played a key role in retention at different points in history. The

sociocultural context of American society has shaped who has been served and in what ways

they have been served during different points in history. The demands placed by society on

higher education and the need for college graduates with earned degrees have grown over time

(Seidman, 2005a).

Policies and interventions have emerged in response to concerns about retention and have

shaped the ways in which retention has developed as well. Policies and interventions at the

federal and state levels have impacted retention as well as trends in types of campus

interventions. The federal government has initiated a number of policy initiatives such as the

Morrill Act (1862), GI Bill, Civil Rights Act (1964), and financial aid that increased the

importance of and access to higher education. As higher percentages of individuals went to

college under such programs, the goal of earning a degree, not merely attending college, became

more desirable (Seidman, 2005a).

Various aspects of student departures from college has been a topic of great interest to

educators and researchers for some time, but the terminology used to explain this phenomenon

has changed over time and includes descriptors such as student morality (Gekowski & Schwartz,

1961; McNeely, 1937) college dropouts (Spady, 1971a; Summerskill, 1962; Tinto 1975), student

attrition (Panos & Astin, 1967; Pantages & Creedon 1978; Sexton, 1965; Tinto, 1993), and

college retention (Berger, 2002; Braxton & Mundy, 2002; Iffert, 1957; Tinto, 1990). While

these terms are closely related, they are not the same. Given the centrality of these key concepts

to the phenomena being studied, they are briefly defined and distinguished from one another as

follows:

- Attrition – refers to students who fail to reenroll at an institution in consecutive

  semesters.

- Dismissal – refers to a student who is not permitted by the institution to continue

  enrollment.

- Dropout – refers to a student whose initial educational goal was to complete at least a

  bachelor's degree but who did not complete it.

- Mortality – refers to the failure of students to remain in college until graduation.

- Persistence – refers to the desire and action of a student to stay within the system of

  higher education from beginning year through degree completion.

- Retention – refers to the ability of an institution to retain a student from admission to the

  university through graduation.

- Stop out – refers to a student who temporarily withdraws from an institution or system.

- Withdrawal – refers to the departure of a student from a college or university campus

  (Berger & Lyon, 2005, p. 7).

The base of empirical and conceptual knowledge about retention has grown and shaped

retention efforts throughout higher education. The earliest studies concerning student mortality,

as student attrition was originally conceptualized, began in the 1930s. In the late 1960s, a more

systematic knowledge based, synthesis of existing studies began to emerge (Seidman, 2005a).

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The 1990s were a time of continued expansion of research, knowledge, and strategies that continued the trend in which retention became a dynamic and full-fledged area of study and permanently established as an educational priority throughout American higher education. It was also a time in which retention as a field of study had become well enough established to begin taking stock of the vast amounts of knowledge that had been collected through thousands of published and unpublished studies (Seidman, 2005a).

While the need for financial aid and the important role it played on campus had been well established in practice for years, the role of finances in retention was one area that began to receive more attention as a field of study in the 1990s. A series of earlier studies by Alberto Cabrera, Nora, St. John, Paulsen, and others (Seidman, 2005a) laid the groundwork for increasing recognition that the ability to pay for college was increasingly important and the recognition of financial barriers was an essential part of studying ways to improve retention (Seidman, 2005a).

Minority Student Retention

Loo and Rolison (1986) reported that in the state of California, the underrepresentation of ethnic minorities in the eight campuses at the University of California system was a critical problem. It was estimated that in the 1990s, that the University of California's system would change and it will be at least 40 percent ethnic minorities in all eight campuses combined. The large gap between college-aged ethnic minorities in the state population and their representation in public universities, coupled with little or no increase in ethnic representation over time, makes research on alienation and satisfaction among ethnic minority and white students important for educational planning and policy, both for this university system and for other institutions of higher learning.

In 2004, the African American students in the University of California system numbers dropped 15%, this was followed by a 9.2% decrease in the American Indian students, 8% of White students, 3% of Latino students, and 2% of Asian American students. The drop occurred due to budget cuts in response to the state's financial crisis. By 2007, 58.2% of students in the University of California system were minority. Out of that percentage, 35.3% were Asian American students. Although the minority numbers are rising, the numbers for African American students and American Indian students were still down.

Loo and Rolison (1986) also reported that the literature on college student satisfaction has been guided largely by the theoretical models of Clark and Trow on typologies of student subcultures and of Spady and Tinto on dropout behavior. Clark and Trow (1966) argued that they are describing students' cultures, not types of specific students. Clark and Trow (1966) indicated that student cultures are founded on a two-dimensional scheme, one being an identification with the college and the second being how involved students are. Tinto (1975) conceptionalize the university as an enclosed social system composed of two subsystems, the academic and the social. An individual becomes academically and socially integrated into the academic and social systems of an institution determine the individual's departure decision. In other words, the extent to which a student is integrated into the academic and social systems of a college determines if they dropout or not (Tinto, 1993). Spady (1971b) suggested that the effects of forces that lead to dropout during the first year will continue to have an impact on the attrition process during the following year.

Researchers such as Tinto and Bean have identified many conditions that contribute to minority student attrition (Person, 1994). Some have cited lack of family financial support, insufficient academic preparation and lower standardized achievement test scores, social

isolation, greater inability to find employment by which to cover educational cost, the tendency to choose 2-year rather than 4-year institutions to become financially productive at a faster rate than 4-year institutions permit, and discrimination, both subtle and obvious (ACE 1984; Altbach & Lomotey, 1991; Astin, 1982). Others have cited institutional expectations for sameness with white students in terms of academic and social behavior, use and need of services, and duration and pattern of matriculation; lack of faculty and administrative role models and support; hostile campus and community climates; differential academic expectations and professional socialization by faculty; and deficient involvement in academic and social campus activities (ACE, 1984; Blackwell, 1981, 1989; Christoffel, 1986; Nettles, 1988; Taylor, 1985). The stressors cited have been recognized as strong influences on minority students' decisions regarding several key choices in their collegiate experiences: institutional choice, enrollment, major field choice, and subsequent persistence to graduation (Astin, 1982; McJamerson, 1991, 1992; Thomas, 1981, 1985).

Research addressing retention and attrition suggests that there are numerous factors related to low retention rates of minority college students (Person, 1994). Based on a synthesis of issues related to student retention, Upcraft and Gardner (1989) outlined a framework for identifying the student and institutional variables that have an impact on the odds of student success in college 1) personal characteristics (motivation, previous achievement, and intellectual ability) 2) demographic characteristics (age, gender, and race), 3) cultural characteristics (ethnic background and socioeconomic status), 4) institutional characteristics (campus site, regional location, selectivity, control, curriculum, and enrollment), and 5) institutional climate (student-faculty interaction, student activities, commuter or residential campus). Prior academic achievement and intellectual ability have been considered primary factors affecting student

retention and learning success. Among the various student characteristics related to college student attrition, the literature has also noted that students with low-level degree goals, lack of financial resources, poor study habits, full-time employment, and parents with low levels of educational attainment have higher student drop-out rates (Mohammadi, 1994). Other researchers (Belcher, 1992; McGregor, Reece, & Garner, 1997; Rendon, 1995; Smith, 1990) contend that African American, Hispanic, and Native American students often enter college with academic deficiencies (for example, lower grades and test scores) and are underrepresented in four-year institutions particularly selective colleges and universities in comparison with White and Asian American students.

The number of African American students enrolled at PWIs has increased, as has the number of African Americans in the United States population (Person, 1994; Simpson & Frost, 1993). Reports show that about 85% of African American students are attending PWIs rather than attending HBCUs (Von Robertson, 2010). PWIs have more public funding and are commonly less expensive than HBCUs. For African American students, one disturbing trend confounds the attrition situation. Despite the fact that most African-American college students attend desegregated, predominantly white institutions (PWIs), higher retention rates for African American students are recorded at historically black colleges and universities (HBCUs) (ACE, 1984; Darling-Hammond, 1985; Thomas & Hill, 1987; Person, 1994). Given the seriousness and the implications of the situation, both the ability and the willingness of PWIs to make necessary and appropriate responses to minority students' needs and concerns have been questioned (Darling-Hammond, 1985). Stikes' (1984) contend that "White universities are failing Black students" (p. 20) derives from this continuing, disproportionate lack of degree attainment at all levels (Trent, 1984).

African American Student Retention

African American students have been a significant part of the predominantly white college and university environment since 1954 (Fleming, 1984). While African American students have attended institutions of higher education for many decades, their participation level has varied and their experiences had not been studied and interpreted from a student culture perspective (Kuh & Whitt, 1988). Although there have been many recruitment, persistence, and retention studies, these have rarely investigated the influence of the African American student culture on student recruitment and persistence (Person & Christensen, 1996).

For the past several decades, greater numbers of black students have chosen to attend predominantly white institutions (PWIs); therefore, it is critically important to understand the impact of student culture on their experiences. Understanding the complexity of this experience requires the consideration of a number of factors, including the campus climate of the particular college or university, the personal characteristics that the students bring to the college, and the influence of the peer group on individual behavior that has an impact on student persistence or attrition (Person & Christensen, 1996).

The increase in college attendance, however, has not kept stride with the shifting demographics of the nation. African Americans and other people of color remain underrepresented in education at all levels (Person, 1994; Simpson & Frost, 1993).

Person and Christensen (1996) presented a study which examined the African American student culture of a liberal arts and engineering institution in eastern Pennsylvania. The study was guided by Newcomb's (1967) outline of the components of student culture research, including the history of the institution, current administrative policies, background characteristics of the students, and their experiences at the college. The focus of the study was specifically on

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the students who identified themselves as black when admitted to the university, the study investigated whether a black student culture existed at the institution. If such culture existed, the study was intended to investigate its values, group members, normative behaviors, and the rate of interaction and group influence on individual behavior (Person, 1994).

The results of the study indicated that the participants had diverse geographical, socio-economic, and familial educational backgrounds, although 29% were first generation college students. A higher percentage of participants were first-year students (37%) then sophomore (15%), junior (12%), or senior (22%) students and 15% of respondents did not indicate their class at school. The study also indicated that the respondents believed there should be institutional support services, such as tutoring, counseling, summer bridge programs, and monitoring of student programs for black students. The study also revealed that black oriented student organizations played a critical role in the lives of the black students. All felt there should be such organizations on campus and almost all were active participants in them (Person & Christensen, 1996).

Historically black colleges and universities (HBCUs) have had the primary responsibility for educating African Americans. These HBCUs claim about four percent of the nation's undergraduates who enroll in four-year colleges and universities. Yet they account for about twenty-seven percent of the African-American undergraduate students enrolled in the nation's colleges and universities. HBCUs once had the predominant role of providing the intellectual and social development for African Americans at the collegiate level. This role appears to be as important today as it has been throughout the past century and a half (Nettles, Wagener, Millett, & Killenback, 1999).

While much of the nation has only recently come to see retention as an important issue, private HBCUs have been working for decades to create cultures where retention is the concern of administrators, faculty, and individual students. Nettles and Perna (1997) reported that in 1989, a higher percentage of African Americans (43.2%) attending HBCUs persisted to the next academic level on time, compared with their African American counterparts attending majority institutions (33.7%). As higher education examines how it might improve student outcomes, it can benefit from the experiences of a few private HBCUs that, with the support of a philanthropic organization, brought their entire academic community together to tackle their challenges in student retention (Swail, Redd, & Perna, 2003).

Seidman (2005a) explained that a number of environmental issues can affect African American retention, both positively and negatively. Peltier, Laden, and Matranga (1999) reported that having other African American roommates positively affected the grade point averages of African American men, whereas academic performance was enhanced for African American women when they were rooming with academically successful students.

Though the retention of African American college students has been a long-time topic of empirical study, actually retaining African American college students remains a problem at most U.S. institutions of higher learning. In the late 1990's, assessments indicated that only about 40% of African American students continue to graduation after 6 years of college (Padilla, Trevino, Gonzalez, & Trevino, 1997). Therefore, far too many African American students left colleges and universities without receiving a degree, particularly those who matriculate at PWIs (Allen, 1991; Kemp, 1990). In early 2000, projections of the U.S. population indicated that African Americans (combined with other minorities) will outnumber Whites by 2015 (Brown, 2000). Taken together, these facts suggest that if the college failure rate remains high for

African Americans, the majority of U.S. citizens would be uneducated and systematically relegated to the lowest social strata, a fact that has major implications for the U.S. both nationally and internationally. Two factors that appear to play critical roles in the persistence decisions of African American students are satisfaction with college and social support (Brown, 2000).

Research shows that African American students enrolled at PWIs have experiences vastly different experiences from their African American counterparts attending HBCUs (Fleming, 1984; Kimbrough, Molock, & Walton, 1996; Sedlacek, 1999). Specifically, African American students at HBCUs reported a greater sense of happiness and life satisfaction versus African American students enrolled in predominantly white colleges (Constantine & Watt, 2002). In contrast, African American students educated at PWIs have reported feelings of isolation, mistrust, and stress (Sedlacek, 1999). Many of these students give accounts of being harassed, mistreated, and experiencing institutional and individual discrimination (D'Augelli & Hershberger, 1993; Jay & D'augelli, 1991). African American students feel that they are constantly reminded of their minority status and alienated from campus life. African American students are far more likely to experience difficulty getting acquainted with students due to their ethnic background than their White counterparts. African American students are also more likely to agree that participation in social and interest groups is affected by race (Rector, 2002). Furthermore, and most troubling, these negative experiences were often as a result of interactions with university administrators, faculty, and classmates (Booker, 2007). Rector (2002) found that on the recognition dimension, African American students feel that they are not accepted by faculty or students as worthwhile individuals.

Social integration has a more influential role in predicting student persistence than does academic integration (Milem & Berger, 1997). Social support appears to be a major determinant of both student's satisfaction with college and their persistence decisions. Research has consistently highlighted the important role that strong, supportive campus interpersonal relationships play in African American student's functioning (D'Augelli & Hershberger, 1993; Fleming, 1984; Hershberger & D'Augelli, 1992; Jay & D'Augelli, 1991). Zea, Jarama, and Bianchi (1995) found that African American students' satisfaction with social support is positively associated with their college adjustment. Social support is arguably the most important determinant of college success and satisfaction, particularly for African American students attending PWIs. Unfortunately, most studies concerning the relationship between social support and African American students' adjustment to predominantly white institutions have not used multidimensional conceptualizations of social support as suggested by contemporary social support researchers (Sarason, Sarason, & Pierce, 1990); the few researchers that have examined social support multidimensionally present somewhat conflicting results. The dimensions of support that are critical to African American students' college adjustment remain unclear (Milem & Berger, 1997).

Models of Retention

Tinto (1975) has the most often cited model that evaluates the importance of student integration in the prediction of student retention. His framework was based on the work of Emile Durkheim's suicide theory that pointed to ones' unsuccessful integration into society as a strong precursor of suicide. Tinto's Integration Model suggested that retention is related to the student's ability and actions to become an involved player in her/his institution (Tinto, 1987). The Integration Model suggests the need for a match between the institutional environment and

student commitment. A good match leads to higher student integration into the academic and social domains of college life and thus greater probability of persistence. Conversely, students are more likely to dropout or transfer to another institution when the match between the students and institution is poor (Hagedorn, 2006).

Building on Spady's (1970) work, Tinto (1975) advanced a model of student departure that explains the process that motivates individuals to leave colleges and universities before graduating. Tinto's theory attributes attrition to the lack of similarities between students and institutions. Tinto's theory basically declares that the matching between the student's motivation and academic ability and the institution's academic and social characteristics help shape two underlying commitments: commitment to an educational goal and commitment to remain with the institution. Accordingly, the higher the goal of college completion and/or level of institutional commitment, the greater the probability of persisting in college.

Bean (1980) advanced an alternative model to explain the college persistence process. Bean's work builds upon process models of organizational turnover (Mallette & Cabrera, 1991; Price, 1972) and models of attitude-behavior interaction (Bentler & Speckart, 1979, 1981). Bean and Metzner (1985) have argued that student attrition is similar to turnover in work organizations and stress the importance of behavioral intentions (to stay or leave) as predictors of persistence behavior. In this context, the Student Attrition Model presumes that behavioral intentions are shaped by the process whereby beliefs shape attitudes, and attitudes, in turn, influence behavioral intents. Beliefs are presumed to be affected by a student's experiences with the different components of an institution. The Student Attrition Model also recognizes that factors external to the institution can play a major role in affecting both attitudes and decisions while the student is still attending college (Bean & Vesper, 1990).

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Bean (1990) was in full agreement of the necessity of integration as he stated, "retention rates are related to the interaction between the students attending the college and the characteristics of the college" (p. 171). Bean (1980) deviates from Tinto's model and stresses that student' beliefs which subsequently shape their attitudes is the predictor of their persistence. Students' beliefs are affected by the interaction between the students and different and corporations.

Measuring Retention

Summerskill (1962) reviewed retention in the 1960s that showed within each type of institution, institutional retention rates varied from 18 percent to 88 percent. He also suggested that there should be a standard formula for measuring retention so that the reported rates could be accurately compared. Forty years later, a standard formula has not yet been universally accepted (Hagedorn, 2006).

The National Survey of Student Engagement (NSSE) is another instrument available to annually collect information from undergraduate students. The information can be used by colleges and universities to help improve student learning. The survey results provide comparative benchmarks to colleges and universities for determining how effectively they are contributing to student learning in five areas: (1) level of academic challenge, (2) active and collaborative learning, (3) student-faculty interaction, (4) educational experiences that are enriching, and (5) supportive campus environment (National Survey of Student Engagement, 2001).

Types of Retention

Hagedorn (2006) examined the different types of student retention and how it is measured. Higher education researchers will likely never reach consensus on the correct or best

way to measure this very important outcome. Hagedorn (2006) defines the different types of students associated with retention and attrition. Examples of the students are:

- Student A: this student enrolls in a university, remained enrolled for two years; leave the university to return six years later.

- Student B: this student enrolls in a university, remains for one year and transfers to another university to complete the degree.

- Student C: this student enrolls in a full time load of courses, but due to low GPA and lack of progress is academically suspended (p. 23).

The formulas and discussion presuppose that retention exists in one variety that is, that students either remain at an institution or they do not. Retention arises in multiple varieties; there are at least four basic types of retention: institutional, system, in the major (discipline), and in a particular course (Hagedorn, 2003).

Institutional Retention is the most basic and easy to understand and is the type measured in the formulas. Institutional Retention is the measure of the proportion of students who remain enrolled at the same institution from year to year. System Retention focuses on the student and turns a blind eye on which the institution a student is enrolled. Using system persistence as a measure, a student who leaves one institution to attend another in considered a persister. Therefore, system persistence accommodates the frequent occurrence of transfer or re-enrollment at another campus, in another state, or in another institutional type such as for-profit institution (Daempfle, 2003).

Retention within a major or discipline is defined as a student who declares engineering as a major but switches to biology, but remains a student at the institution. Retention within the Course is the smallest type of retention that measures if the student completes the course.

Hagedorn (2006) found that retention is essential for the institution to identify the effectiveness of a college. It allows students, parents, and stakeholders to account for their investments.

Theoretical View of Retention

College students possess various characteristics such as gender, race, academic, aptitude, academic achievements, family socioeconomic background, and parent educational levels and different levels of initial commitment to the institution (Tinto, 1987). These characteristics and the initial level of institutional commitment influence the passage of students through the separation stage. Separation occurs prior to and at the outset of institutional experiences in both the academic and social systems. As students enter colleges, they are required to disassociate to some extent from family and friends from their community. This separation constitutes the first stage of passage into the college career and may require some personal transformation and possibly negative reaction when they go back home (Elkins, Braxton, & James, 2000).

Bean (1980, 1983) modified Price and Mueller's (1981) model of employee turnover in work organizations to the problem of student departure from colleges and universities. In Bean's theoretical model, ten variables influence satisfaction, which in turn influences a student's intent to leave. Intent to leave then has a direct impact on a student's decision to persist in college. Influences on satisfaction include five variables identical to Price and Mueller's model: routinization, participation, instrumental communication, integration, and distributive justice. The constructs of participation, communication, and distributive justice are organizationally based. Bean added the following five variables which influence satisfaction: grades, practical value, development (which represent Price and Mueller's concept of pay and rewards), courses (job content), and membership in campus organizations (professionalism).

All of the variables have a positive effect on satisfaction except for routinization. Two additional variables influence a student's intent to leave and his or her departure decision. The first is derived from Price and Mueller's (1981) variable of kinship responsibility, which Bean terms marriage. The likelihood of marriage increases the likelihood of a student's intent to leave and drop out. The final determinant of intent to leave and drop out is opportunity. Bean defines this as the student's opportunity to transfer to another college (Seidman, 2005).

Astin (1984) stated that "student involvement refers to the amount of physical and psychological energy a student devotes to the academic experience" (p. 297). Involvement pertains to the behaviors students engage in while attending college, which influence student outcomes, including persistence. Astin's theory comprises five basic tenets. First, involvement can be generalized (e.g. the student experience) or specific (e.g. preparing for test). Next, involvement occurs along a continuum which is distinct for each student at a particular time. Involvement also possesses quantitative and qualitative aspects. Furthermore, the amount of student learning and personal development associated with any educational program is directly influenced by the quantity of student involvement in the program. Finally, the effectiveness of educational policy or practice is directly related to its capacity to increase student involvement (Seidman, 2005a).

Tinto (1975) extended Spady's (1970a) work on connecting Durkhiem's (1951) theory of suicide to the study of college student persistence. Tinto viewed student departure as a longitudinal process that occurs because of the meanings the individual students credit to their interactions with the formal and informal aspects of a given college or university (Braxton, Sullivan, & Johnson, 1997; Tinto 1986, 1993). Such interactions occur between the individual student and the academic and social systems of a college or university (Seidman, 2005a).

Tinto (1975) also contends that various individual characteristics (for example, family background, individual attributes, and pre-college schooling experiences) that students possess as they enter college directly influence their departure decisions, as well as their initial commitment to the institution and initial commitment to the goal of graduation. This influences the level of a student's integration into the academic and social systems of the college or university (Seidman, 2005a).

According to Tinto (1975), academic integration consists of structural and normative dimensions. Structural integration entails meeting the standards of the college or university, whereas normative integration pertains to an individual's identification with the normative structure of the academic system. Social integration pertains to the extent of congruency between the individual's identification with the normative structure of the academic system. Tinto holds that social integration occurs both at the level of the college or university and at the level of subcultures of an institution (Tinto, 1975).

College programs that promote student institutional fit from the beginning and programs that promote student development and involvement in the institution are more likely to produce satisfied students. Recruiting types of students that best fit a certain environment will also likely increase retention. These more satisfied students, in turn, should achieve their academic and personal goals more fully than those who are not satisfied with the institution or its environment. This simple commonsense theory also seems consistent with Tinto's (1975) theory, where student integration into the formal and informal academic and social systems of a college or university will determine leaving behavior. In view of these overarching findings about minority student retention and what has been useful in helping minorities complete their education, these variables can be introduced, strengthened where needed, and expected to produce positive

results.   Following are a few of the more significant examples of barriers and of programs to help minority students overcome them and persist (Seidman, 2005a).

Tinto's Theory of Student Departure

Tinto's theoretical model (1975) was derived from previous work by Spady (1970a). Spady, like Tinto a sociologist, presented one of the early conceptual models of the student attrition process in higher education. Based on Durkhiem's theory of suicide, Spady suggested that suicide is more probable when individuals are poorly integrated into the shared structure and theorized that the social integration of students increases the student's institutional commitment, ultimately reducing the likelihood of student attrition. Tinto (1975) expanded Spady's theory to the process of student integration into the academic and social systems of a higher education institution. His aim was to clarify the effect of intricate interactions within the system on student persistence. "It is the interplay between the individual's commitment to the goal of college completion and his commitment to the institution that determines whether or not the individual decides to drop out" (Tinto, 1975, p. 96).

Tinto's model refocused the higher education community's understanding that persistence is the outcome of the interaction between students and their experiences in the campus environment (Brower, 1992). Although Tinto's model accounted for student characteristics and campus experiences, it failed to include the interactions of students' off-campus academic and social systems (Tinto, 1982). Tinto acknowledged that these external, not-related-to-college variables might force students to reconsider educational goals and commitment to the institution. He failed, however to address in detail the impact of external campus factors such as finances, family obligations, and external peer groups in his student dropout model

(Cabrera, Castaneda, Nora, & Hengstler, 1992; Tinto, 1982). Tinto also recognized that finances might have both long-and-short-term and direct and indirect effects on college persistence.

Tinto (1993) noted that African American students may be more likely than the White students to struggle with social integration because of the largest campuses, African American students have relatively fewer options as to the types of communities in which to establish membership than White students. Allen (1985) found that while two thirds of African American students at HBCUs felt they were a part of campus life and 26% reported the highest level of involvement, African American students at PWIs were less involved. Only 38% of African American students at PWIs felt they were a part of campus life, and 8% reported being involved at the highest levels (Harper, 2008).

Much of the literature regarding retention issues focuses on the social and academic integration of students within the university. Tinto's (1975) longitudinal model of student dropout suggests that students' level of academic and social integration with the university and their goal and institutional commitment are the major factors in their ability to persist in college. Building on Durkheim's (1951) suicide theory, Tinto (1975) suggested that, like suicide victims who were removed from the social fabric of society, students who are likewise removed from the social fabric of the college community are more likely to leave college than persist. "In Durkheim's view, individual integration into the social and intellectual life of society and the social and intellectual membership that integration promotes are essential elements of social existence in human society. Societies with high rates of suicide are those whose social conditions are such as to constrain such membership" (Tinto, 1993, p. 102).

Hurtado and Carter (1997) defined students' sense of belonging as their psychological sense of identification and affiliation with the campus community. Theorizing on student

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persistence, they view students' subjective sense of belonging as conceptually distinct from behavioral indicators of participation, or integration, in the social and academic aspects of university life (Spady, 1971b). Specifically, Hurtado and Carter (1997) argue that "when students become integrated into the social and academic systems of the university, they develop a psychological sense of belonging to the university community, which is an important precursor to desirable outcomes such as increased commitment and persistence" (p. 325). However, as Hurtado and Carter (1997) pointed out, the distinction between behavioral indicators of social and academic integration and students' psychological sense of belonging has been largely neglected in existing models of student persistence and involvement (Astin, 1984; Pascarella & Terenzini, 1980; Tinto, 1987, 1993).

Tinto's (1987, 1993) key aspect in his social integration model indicates that students' integration into their social and academic college environment predicts whether they are likely to remain enrolled in college. Although integration can consist of both behavioral involvement and a psychological sense of belonging, measures of integration used to test Tinto's model have focused heavily on behavioral involvement, such as reported interactions with peers and faculty (Pascarella & Terenzini, 1980).   Astin's (1984) model emphasizes that behaviors indicative of student involvement cultivate student learning and development, which can ultimately lead to increased persistence. In an attempt to identify overlap in these two models, Berger and Milem (1999). Milem and Berger (1997) found that students who reported more involvement behaviors also report more social integration, which is then associated with commitment to the university and intentions to enroll for a second year (Milem & Berger, 1997), and actual re-enrollment (Berger & Milem, 1999). As in past research focused on the Tinto and Astin models; however, Berger and Milem (1999) did not examine students' subjective sense of belonging, which would

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at least partially explain the effects of social integration on commitment and persistence (Hausmann, Ye, Schofield, & Woods, 2009).

Bean and Eaton's Psychological Model

Tinto's model has been revised or enhanced by a number of researchers (Bean, 1982; Brower, 1992; and Peterson, 1993; Stage, 1989). Bean (1982, 1986), Eaton and Bean (1995) and Bean and Eaton (2000) used important aspects of Tinto's academic and social integration theory in the development of a psychological rather than sociological model. The purpose, according to Bean, was to help others "visualize how individual psychological processes can be understood in the retention process" (Bean & Eaton, 2000, p. 55). Bean's model is based on the organizational process models of turnover, which emphasize the significance of behavioral intentions. Intentions to persist are influenced by students' attitudes, which are shaped by their experiences with institution. Bean's model incorporates background, organizational, environmental, attitudinal, and outcome variables (Seidman, 2005a).

Criticisms of Social Integration Models

In 1992, Cabrera, Castaneda, Nora, and Hengstler looked at both Tinto's student integration model and Bean's model of student departure and found that a blend of the two models provided a more comprehensive understanding of persistence than either theory alone. As well, they incorporated finances into the student retention model. Although they found no significant direct effect of finances on student attrition, they found an indirect effect through intervening variables like students' academic integration, socialization, and resolve to persist in college (Seidman, 2005a).

As Cabrera, Castaneda, Nora, and Hengstler's (1992) study suggested, Tinto's and Bean's models are not mutually exclusive and have more similarities than differences. Both

models argue that precollege characteristics are determinants of college behaviors and actions that the student/institution fit are important issues, and that persistence is a result of a complex set of interactions (Hossler, 1984). But the research community, while embracing these theoretical models, has limited its enthusiasm because of the lack of empirical evidence to substantiate their effectiveness in describing the process of student integration and departure from college. A recent review of empirical analysis of Tinto's theory (Braxton & Lien, 2000) sorted published studies into two categories: supportive or unsupportive. Although there was evident support the theory of student departure in several areas, the authors concluded that there was not enough empirical support to substantiate much of Tinto's theory of student departure.

Summary

The literature shows that African American students socially integrate differently at predominantly white institutions than white students, but no one has really figured the causes of why these students integrate differently than white students. Tinto claims that student persistence depends on the extent of successful integration into social and academic structures of the institution. Understanding African American student integration at PWIs is an important element in making an institution more diverse. With this understanding, institutions should explore the literature surrounding social integration so administration can provide monumental and long-lasting outcomes for African American students at their institution.

Chapter 3

Methods

In this study, social integration ranks as the primary agent in assessing and defining the quality of education among underrepresented college students. The study will include several entities, such as campus climate and programs that bound with social integration and retention of underrepresented students in higher education.

Purpose of the Study

The purpose of this study was to assess the need for social integration of African American students at PWIs. The factors that can influence social integration were by race, gender, climate, campus services, faculty, and institution type. The study was designed to gain a better understanding of how African American students socially integrate at PWIs. Specifically, this study is meant to figure out how the African American students are able to socially integrate with white students at their institution. The data to be analyzed in the study were collected from freshmen at colleges and universities across the United States, using responses from Your First College Year Survey (YFCY) of the Cooperative Institutional Research Program (CIRP).

This chapter presents the methods used in this research study to include the purpose and design of the study, population and sample selection, instrument validity and reliability, and data collection strategies. The chapter will conclude with a discussion of the data analysis process.

Research Questions

The study will examine the following research questions:

1. What factors, related to satisfaction, affect students' social integration within the institution?

2. What factors, related to campus climate, affect students' social integration?

3. How does gender affect students' social integration within the institution?

4. What factors, related to student services, affect students' social integration?

5. What factors, related to faculty, affect students' social integration?

Sample

The participants in this study were 1,037 full-time African American students who attended 4-year institutions during 2006. The researcher could not use more recent data due to the restrictions of Higher Education Research Institute. When the researcher sent in the request to use Cooperative Institutional Research Program data, Higher Education Research Institute explained to the researcher that the only data that could be used was the data that has not been analyzed. The data from 2006 was the only data that had not been analyzed and the final report was not completed. Once the researcher agreed to the terms, the data was sent in SPSS format. The sample was drawn from 117 four-year colleges. A list of the schools that participated in the Cooperative Institutional Research Program study can be found in Appendix 3. The institutions represented are from all regions of the United States, including urban, suburban, and rural settings.

Instrumentation

This is a quantitative study using the data collected from a 28 question survey entitled Your First College Year, developed and conducted by the Higher Education Research Institute (HERI) at the University of California, Los Angeles and the Policy Center on the First Year of College at Brevard College. This survey was designed in early 1999 to measure

students' curricular and co-curricular experiences since entering college and to be administered at the end of the first year. This survey was also designed to post-test several items from the Cooperative Institutional Research Program (CIRP) Freshman Survey to encourage longitudinal assessment of first-year students. The Cooperative Institutional Research Program Freshman Survey is administered annually to over 400,000 incoming college freshman at more than 700 colleges and universities around the country (Hurtado, Sax, Saenz, Harper, Oseguera, Curley, Lopez, Wolf, & Arellano, 2007). The present study used the data from Your First College Year Survey (YFCY), which has been administered for more than 10 years.

Your First College Year

Through financial support from the Atlantic Philanthropies and the Pew Charitable Trusts, Higher Education Research Institute and the Policy Center designed and pilot-tested the YFCY survey from 1999 to 2001. By the first few weeks of the survey development, the project team titled the instrument. The YFCY is the first national survey specifically designed to measure student development in the first college year. The survey consists of 253 items in 28 questions. In 2005, the YFCY surveyed 38,538 first-time, full-time students at 144 colleges and universities that submitted responses by the cut-off date for the survey. Over ninety percent of the institutions surveyed also participated in the 2004 Cooperative Institutional Research Program Freshman Survey (Hurtado, Sax, Saenz, & et. al., 2007). YFCY is a standardized instrument reviewed and modified annually by Higher Education Research Institute. A copy of the instrument can be found in Appendix 2.

Validity and Reliability

There are several ways to estimate the validity of data. Construct validity is the type of measure used to determine the validity of quantitative research or instrumentation. Construct

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validity is defined as "the degree to which a measure actually assesses the underlying theoretical construct it is supposed to assess" (Light, Singer, & Willett, 1990, p. 156). Factor analyses aids in verifying that the YFCY survey as a valid measure of several constructs critical to the first-year experience. Reliability is another important aspect of instrumentation. Reliability is defined as the degree of internal consistency or stability of the measure over a period of time (Borg, 1981).

The YFCY was first established in 1999 and distributed in 2000 as a national longitudinal study of the American higher education system. It is known as the follow-up instrument for The Freshman Survey. The construct validity for the YFCY survey is reviewed each year by Higher Education Research Institute and the Policy Center to ensure YFCY items measure what they intended to measure.

Reliability and validity are indicators in research that denote the quality of the data and results of the instrument. Mertens (2005) explains that reliability in essence is concerned with the consistency of a set of measurements or also concerned with the measuring instrument itself. Internal consistency reliability coefficients (Cronbach's coefficient alpha) for selected scales should exceed the 0.70 reliability standard for group level comparison within the research study (Nunnally & Bernstein, 1994). Your First College Year had one dependent variable and five independent variables. The dependent variable was social integration has a Cronbach's alpha α = 0.83. The independent variables satisfaction has a Cronbach's alpha α = .85, campus climate has a Cronbach's alpha α = .79, student services has a Cronbach's alpha α = .53, and faculty has a Cronbach's alpha α = .72. Reliability involves consistency in measurement, but doesn't imply validity.

Data Collection Procedures

Your First College Year was successfully administered nationwide in 2002, 2003, 2004, and 2005. Since the survey was so successful, it was administered again in spring 2006. Similar to previous national administrations, registration for the 2006 YFCY was available to all colleges and universities regardless of institutional participation in the 2005 Cooperative Institutional Research Program Freshman Survey. Enrollment in the 2006 YFCY was open to institutions that planned to use the survey as a stand-alone assessment tool as well as to those that intended to utilize it as a follow-up instrument. An invitation to participate was mailed during the fall of 2005 to all regionally-accredited and four-year institutions across the country. These invitations were mailed to various campus personnel, including Institutional Research offices, Vice Presidents of Academics Affairs, Student Affairs Officers, Presidents, Directors of First-Year Programs, and Dean of Students. YFCY is a four-page survey used to collect information on demographics, campus climate, curricular and co-curricular activities, and social integration.

To collect information needed for this research, data were drawn from the following areas. First, because this study seeks to examine the factors that influence social integration of African American students at PWIs, the researcher used data from Questions 6, which determined how well the respondent interacted while enrolled in the institution; the researcher used data from Questions 9 and 14 to determine how comfortable the African American students were at the institution; and the researcher used data from Questions 13, 18, and 19 to determine how satisfied the respondents were at the institution. Also, questions 11, 16, and 17 provided the researcher insight on how diverse the institution is. Question 11 was also used as the dependent variable for the study.

The questions used in the study are as follows:

Question 6: Since entering this college, how often have you interacted with the following people (e.g., by phone, e-mail, instant messenger, or in person):

- Faculty during office hours

- Faculty outside of class or office hours

- Academic Advisors/Counselors

- Other college personnel

- Graduate students/Teaching assistants

Question 9: Since entering this college, how often have you felt:

- Lonely or homesick

- Isolated from campus life

- That your job responsibilities interfered with your schoolwork

- That your family responsibilities interfered with your schoolwork

- That your social life interfered with your schoolwork

- Family support to succeed

Question 11: Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself.

- Academic ability

- Drive to achieve

- Leadership ability

- Public speaking ability

- Self-confidence (intellectual)

- Self-confidence (social)

- Understanding of others

Question 13: Please rate your satisfaction with this institution on each of the aspects of college life listed below:

- Your overall academic experience

- Classroom facilities

- Library facilities and services

- Academic advising

- Tutoring or other academic assistance

- Student housing facilities

- Leadership opportunities

- Opportunities for community service

Question 14: Since entering this college, how has it been to?

- Develop effective study skills

- Adjust to the academic demands of college

- Get to know faculty

- Develop close friendships with male students

- Develop close friendships with female students

- Develop close friendships with students of a different racial/ethnic group

- Utilize campus services available to students

Question 16: Please indicate the extent to which you agree or disagree with the following statements:

- In class, I have been singled out because of my race/ethnicity or sex

- In class, I have heard faculty express stereotypes about racial/ethnic groups, women, and men

- The admission/recruitment materials portrayed this campus accurately

- I see myself as part of the campus community

- There is a lot of racial tension on this campus

- I feel like I am just another number on this campus

- I feel a sense of belonging with this college

Question 17: To what extent have you experienced the following with students from a

racial/ethnic group other than your own?

- Had meaningful and honest discussions about race/ethnic relations outside of class

- Had intellectual discussions outside of class

- Felt insulted or threatened because of race/ethnicity

- Studied or prepared for class

- Socialized or partied

- Attended events sponsored by other racial/ethnic groups

Question 18: Please rate your satisfaction with this institution on each of the aspects of college

life listed below:

- Amount of contact with faculty

- Class size

- Interaction with other students

- Respect for the expression of diverse beliefs

- Availability of campus social activities

- Your social life

- Overall sense of community among students

Question 19: Since entering college have you:

- Changed your career choice

- Participated in student government

- Joined a social fraternity or sorority

- Played varsity/intercollegiate athletics

- Participated in student clubs/groups

- Sought personal counseling

- Failed one or more courses

- Participated in leadership training

- Communicated regularly with your professors

- Been satisfied with this college

- Enrolled in a formal program where a group of students take two or more courses
  together (e.g., FIG, learning cluster, learning community, linked courses)

- Participated in an academic enrichment/support program

Data Collection

Data used for this survey were collected by the Higher Education Research Institute

(HERI) at the University of California, Los Angeles. Higher Education Research Institute

collects data from colleges and universities who have paid Higher Education Research Institute

to analyze data from their data. Due to confidentiality, Higher Education Research Institute has

firm policies regarding off-site individuals wishing to use Cooperative Institutional Research

Program data for research purposes. Higher Education Research Institute guidelines dictate that

all analyzes of Cooperative Institutional Research Program data must be conducted at Higher

Education Research Institute only, which requires Higher Education Research Institute to submit

the data in SPSS and forward it to the researcher. Higher Education Research Institute only

sends the data the researcher requested; no other data will be available.

<center>Analysis</center>

This study examined the factors that influence social integration of African American

college students attending 4-year institutions. Quantitative data were collected and coded for

input into SPSS version 18. Input variables were considered and controlled to establish an

independent relationship between each factor. This study used both descriptive statistics and

inferential analysis. Descriptive data was used to explain the demographic characteristics of the

sample such as race and gender.   Comparison of means using ANOVA will be used to test for a

relationship between gender and social integration. Simple regression will be used to test

relationships between social integration and campus climate, student services, faculty, and

satisfaction. For this study, the dependent variable is social integration which is defined as

academic ability, drive to achieve, leadership ability, intellectual self-confidence, social self-

confidence, public speaking ability, and understanding of others. Campus climate, faculty,

student services, and satisfaction are the independent variables also defined for this study.

Campus climate is defined as hostile situations, attending cultural activities, having

conversations with students who are of a different race or ethnicity, feeling insulted or threatened

because of their race/ethnicity, and their social life while at college. Satisfaction is defined as

academic excellence, classroom facilities, library facilities, leadership opportunities, on campus

housing, and tutoring services. Student services are defined as the interaction and satisfaction

with college personnel, academic advisors/counselors, tutoring or other academic assistance,

financial aid officers, and psychological counseling services. The last research questions

pertains to faculty which is ask questions such as do the student interact with faculty during

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office hours, outside of class or office hours, do faculty members make the student feel comfortable during class.

Summary

This study used quantitative research design to evaluate the data used in this study. Your First College Year survey was used to collect the data. Cooperative Institutional Research Program administered the survey to freshman at 117 colleges on the United States. Cooperative Institutional Research Program sent the data for the African American students surveyed to the researcher via email after the researcher signed a consent form which is that can be found in Appendix 2. The dependent variable was social integration and the independent variables were Campus climate, gender, student services, and faculty.

This chapter discussed the methods used to conduct this study as well as the research questions that were used to guide the study. Survey research is non-experimental research which seeks to understand characteristics of a population through gathering and analyzing data from questionnaires or interviews (Johnson & Christen, 2004). The chapter describes the purpose, significance, research questions, instrumentation, design and approach, setting and sample, instrumentation, data collection and analysis. Chapter 4 will present the results from the study using tables and descriptive form.

Chapter 4

The purpose of this study was to assess the need for social integration of African American students at PWIs. The factors that can influence social integration were by race, gender, climate, campus services, faculty, and institution type. The study was designed to gain a better understanding of how African American students socially integrate at PWIs. Specifically, this study is meant to figure out how the African American students are able to socially integrate with white students at their institution. The data to be analyzed in the study were collected from freshmen at colleges and universities across the United States, using responses from Your First College Year Survey (YFCY) of the Cooperative Institutional Research Program (CIRP). This chapter presents the results of study by presenting the answers to the research questions used to guide the study.

Research Questions

The study examined the following research questions:

1. What factors, related to satisfaction, affect students' social integration within the institution?

2. What factors, related to campus climate, affect students' social integration?

3. How does gender affect students' social integration within the institution?

4. What factors, related to student services, affect students' social integration?

5. What factors, related to faculty, affect students' social integration?

The research questions for this study investigated social integration of African American students in regards to student satisfaction, campus climate, gender, student services, faculty, and

whether a relationship exists between social integration in regards to student satisfaction, campus climate, gender, student services, and faculty. The social integration variable consists of academic ability, drive to achieve, leadership ability, intellectual self-confidence, social self-confidence, public speaking ability, and understanding of others. Research Question 1 seeks to understand how social integration relates to student satisfaction such as academic excellence, classroom facilities, library facilities, leadership opportunities, on campus housing, and tutoring services. Research Question 2 seeks to understand how social integration relates to campus climate such as being in hostile situations, attending cultural activities, having conversations with students who are of a different race or ethnicity, feeling insulted or threatened because of their race/ethnicity, and their social life while at college. Other variables for campus climate are: participated in varsity/intercollegiate athletics, participated in student clubs/groups, participated in student government, and school satisfaction.

For Research Question 3, the researcher seeks to understand how social integration relates to gender. Research Question 4 seeks to understand how social integration relates to student services such as interaction and satisfaction with college personnel, academic advisors/counselors, tutoring or other academic assistance, financial aid officers, and psychological counseling services. Research Question 5 seeks to understand how social integration relates to faculty such as: do the students interact with faculty during office hours, outside of class or office hours, and do the faculty members make the student feel comfortable during class.

<center>Sources of Data and Collection Procedures</center>

The population of the study was 1,037 African American freshmen who attended 4-year institutions in 2006. Data from 2006 was used because Cooperative Institutional Research

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Program would only allow the researcher to use data that has not been reported. Data from 2007

to 2009 had been reported by Cooperative Institutional Research Program. Data from 2010 was

not available yet. The sample was drawn from 117 four-year colleges. A list of schools that

participated in the Cooperative Institutional Research Program study in 2006 can be found in

Appendix 3. The institutions represented are from all regions of the United States, including

urban, suburban, and rural settings. Out of the 1,037 African American students, 630 (61%)

students were female, 407 (39%) students were male, 993 (96%) students native language is

English, and all 1,037 students were full-time. Table 1 provides a summary of the participants'

gender and language information.

Table 1

Demographic Information

Demographics	Frequency	Percent
Gender		
Male	407	39.0
Female	630	61.0
Total	1037	100.00

Summary of Statistics

Survey data were scored and analyzed using SPSS Version 19.0. In order to address the

research questions, both descriptive and inferential statistics were exercised. However, prior to

computing all variables for this study, a reliability analysis was conducted using Cronbach's

alpha. The reliability coefficients are presented in Table 2 and indicated that the internal

reliability of all variables except student services was high (.533) to very high (.85).

Table 2

Cronbach's Alpha for Variables of Interest

Variables	No. of Items	Alpha
Social Integration (DV)	7	.83
Satisfaction (IV)	15	.85
Campus Climate (IV)	47	.79
Student Services (IV)	5	.53
Faculty	7	.72

Table 3

Item Statistics for Social Integration

	Mean	Std. Deviation	N
Academic ability	3.57	.72	1006
Drive to achieve	3.98	.85	1006
Leadership ability	3.75	.90	1006
Public speaking ability	3.29	1.01	1006
Self-confidence (intellectual)	3.82	.90	1006
Self-confidence (social)	3.78	.98	1006
Understanding of others	3.85	.81	1006

Data Analysis

The first research question was "What factors related to satisfaction effect students'
social integration within the institution?" Table 4 contains the descriptive statistics and summary
for the factors pertaining to satisfaction. An analysis of Pearson Product Moment Correlation
was conducted to examine the relationship between satisfaction and social integration.
Significance level of 0.05 (alpha) was used. Only those tests that resulted in a
$\rho < 0.05$ were reported as statistically significant, indicating that the statistical results were not
due to sampling error.

Table 4

Item Statistics for Satisfaction

	Mean	Std. Deviation	N
Your overall academic experience	4.72	.87	947
Classroom facilities	4.76	.79	947
Library facilities & services	4.90	.92	947
Academic advising	4.67	1.03	947
Tutoring or other academic assistance	4.42	1.25	947
Student housing facilities	4.07	1.25	947
Leadership opportunities	4.25	1.37	947
Opportunities for community service	4.20	1.46	947
Amount of contact with faculty	4.58	.96	947
Class size	4.90	.88	947

Table 4 cont.

Item Statistics for Satisfaction

	Mean	Std. Deviation	N
Interaction with other students	4.84	.86	947
Respect for the expression of diverse beliefs	4.60	.94	947
Availability of campus social activities	4.54	1.05	947
Your social life	4.69	1.04	947
Overall sense of community among students	4.50	.98	947

Pearson product-moment correlation was calculated to examine the correlation between satisfaction and social integration (Table 5). The statistics provide information about the strengths and degree of the relationship between two variables with a correlation greater than 0.7 recommended for establishing that a relationship exists. The correlation between satisfaction and social integration was 0.28. This score indicates a weak correlation between satisfaction and social integration.

A standard regression was also conducted to show if satisfaction can predict social integration. The regression analysis showed that satisfaction has an impact on social integration. The model summary showed that $r^2 = 0.08$ which indicate that 8% of social integration can be explained by its linear relationship with satisfaction. Therefore, satisfaction uniquely accounts for 8% of the variance in social integration.

Table 5

Regression Model Summary between factors for Satisfaction and Social Integration

Variable	Means	r	r²	Unstandardized Beta	t-test	ρ-value
Satisfaction	26.93	.28	.08	.299	9.49	.001

Analysis of Variance (ANOVA) indicates the relationship between satisfaction and social integration ($F_{(1,035)}$ = 89.97 and ρ < .001). Table 6 shows satisfaction (t-test value of 9.49 and ρ < .001) was found to significantly contribute to the level of students' social integration. The unstandardized beta value (b = .299) indicates for each unit change in satisfaction there is a .299 unit change in students' social integration.

Table 6

ANOVA for Satisfaction and Social Integration

	Sum of Squares	Df	Mean Square	F	Sig.
Satisfaction	1571.19	1	1571.19	89.97	.000

The second research question, "What factors related to campus climate effect students' social integration?" An analysis was conducted to examine the correlation between campus climate and social integration.

For this research question, statistically significant correlations were noted between campus climate and social integration with a correlation of 0.28. This score also indicates a weak correlation between campus climate and social integration.

A standard regression was conducted to address the research question asking whether or not campus climate can predict social integration. The results indicated that campus climate had

an impact on social integration with $r^2 = .08$, which indicates that about 8% of social integration can be explained by its campus climate. In essence, campus climate uniquely account for about 8% of the variance in social integration.

Table 7

Regression Model Summary between factors for Campus Climate and Social Integration

Variable	Means	r	r^2	Unstandardized Beta	t-test	ρ-value
Campus Climate	25.93	.28	.08	.09	9.22	.001

Table 8

Item Statistics for Campus Climate

	Mean	Std. Deviation	N
Faculty during office hours	3.15	1.41	804
Faculty outside of class of office hours	2.61	1.44	804
Academic advisors/counselors	2.55	1.10	804
Other college personnel	2.79	1.61	804
Graduate students/teaching assistants	2.24	1.56	804
Lonely or homesick	1.81	.67	804
Isolated from campus life	1.58	.69	804
That your job responsibilities interfered with your schoolwork	1.40	.60	804
That your social life interfered with your schoolwork	1.78	.70	804
Family support to succeed	2.47	.70	804
Develop effective study skills	2.65	.76	804

Table 8 cont.

Item Statistics for Campus Climate

	Mean	Std. Deviation	N
Adjust to the academic demands of college	2.67	.80	804
Get to know faculty	2.89	.77	804
Develop close friendships with male students	3.07	.90	804
In class, I have been singled out because of my: Race/ethnicity	1.99	.98	804
In class, I have been singled out because of my sex	1.73	.80	804
In class, I have heard faculty express stereotypes about: Racial/ethnic groups	2.09	.96	804
In class, I have heard faculty express stereotypes about: women	2.07	.92	804
In class, I have heard faculty express stereotypes about: men	2.02	.91	804
The admission/recruitment materials portrayed this campus accurately	2.58	.79	804
I see myself as part of the campus community	2.83	.75	804
There is a lot of racial tension on this campus	2.29	.93	804
I feel like I am just another number on this campus	2.30	.90	804
I feel a sense of belonging to this college	2.72	.80	804
Had a meaningful and honest discussions about racial/ethnic issues outside of class	3.39	1.31	804

Table 8 cont.

Item Statistics for Campus Climate

	Mean	Std. Deviation	N
Had tense, somewhat hostile interactions	2.28	1.23	804
Had intellectual discussions outside of class	3.42	1.28	804
Felt insulted or threatened because of race/ethnicity	2.13	1.22	804
Studied or prepared for class	3.66	1.18	804
Socialized or partied	3.68	1.24	804
Attended events sponsored by other racial/ethnic groups	3.31	1.33	804
Changed your career choice	1.26	.44	804
Participated in student government	1.05	.23	804
Joined a social fraternity or sorority	1.04	.20	804
Played varsity/intercollegiate athletics	1.17	.39	804
Participated in student clubs/groups	1.52	.50	804
Sought personal counseling	1.10	.30	804
Failed one or more courses	1.19	.39	804
Participated in leadership training	1.10	.29	804
Communicated regularly with your professors	1.41	.49	804
Been satisfied with this college	1.62	.49	804
Enrolled in a formal program where a group of students take two or more courses together (learning community)	1.06	.24	804
Participated in an academic enrichment/support program	1.12	.33	804

Analysis of Variance (ANOVA) indicates the relationship between campus climate and social integration ($F_{(1,035)} = 85.09$ and $\rho < .001$). Table 8 shows campus climate (t-test = 9.22 and $\rho < .001$) was found to significantly contribute to the level of students' social integration. The unstandardized beta value (b = .09) indicates for each unit change in campus climate there is a .094 units change in students' social integration.

Table 9

ANOVA for Campus Climate and Social Integration

	Sum of Squares	Df	Mean Square	F	Sig.
Campus Climate	1492.48	1	1492.48	85.09	.001

The third research question, "How does gender effect students' social integration within the institution?" The results for the Levene's Test for gender was $\rho > .67$ which is not significant, therefore the assumption related to equality of variances across gender in the population was not violated in the sample (See Table 10).

Table 10

Levene's Test of Equality of Error Variances

	F	df1	df2	Sig.
Gender	.19	1	1035	.67

Analysis of Variance (ANOVA) indicates the relationship between gender and social integration ($F_{(1,035)} = 9.49$ and $\rho = .002$) and a partial eta squared of .009 shows a small effect size (See Table 11). The results show no relationship between gender and social integration. It also explains that when it comes to gender, it is not necessarily affected by social integration.

Table 11

Tests of Between-Subject Effects for Gender

Variable	Type III Sum of Squares	df	Means Square	F	Sig	Partial Eta Squared
Gender_1	178.48	1	178.48	9.488	.002	.009

The fourth research question, "What factors related to student services effect students' social integration?" Pearson product-moment correlation was calculated to assess the correction between student services and social integration. The results did not yield statistically significant correlations between student services and social integration (.22), but the score also indicates a weak correction between student services and social integration.

A regression analysis was conducted to determine if student services predicts social integration. Five percent of the variance in social integration can be accounted for by its linear relationship with student services.

Table 12

Regression Model Summary between factors for Student Services and Social Integration

Variable	Means	r	r²	Unstandardized Beta	T-test	ρ-value
Student Services	24.28	.22	.05	.19	7.21	.001

Table 13

Item Statistics for Student Services

	Mean	Std. Deviation	N
Academic advisors/counselors	2.55	1.10	980
Other college personnel	2.78	1.61	980

Table 13 cont.

Item Statistics for Student Services

	Mean	Std. Deviation	N
Graduate students/teaching assistants	2.23	1.56	980
Academic advising	4.65	1.05	980
Tutoring or other academic assistance	4.40	1.27	980

The ANOVA, the results yielded statistical significance (F $_{(1,035)}$ $=$ 51.917 and $\rho < .001$).

Table 14 shows student services was found to significantly contribute to the level of students'

social integration (t-test value of 7.21 and $\rho < .001$). The unstandardized beta value (b $=$ .19)

indicates for each unit change in student services there is a .19 unit change in students' social

integration.

Table 14

ANOVA for Student Services and Social Integration

	Sum of Squares	Df	Mean Square	F	Sig.
Student Services	938.45	1	938.45	51.92	.001

The last research question, "What factors related to faculty effect students' social

integration?" Pearson product-moment correlation was conducted and indicated that it was a

significant correlation between faculty and social integration. The correlation of 0.22 indicates a

weak correlation between faculty and social integration.

The regression analysis indicates that faculty had an impact on social integration with an

$r^2 = 0.05$ which indicates that 5% of social integration can be explained by its linear relationship

with faculty interaction.

Table 15

Regression Model Summary between factors for Faculty and Social Integration

Variable	Means	r	r²	Unstandardized Beta	T-test	ρ-value
Faculty	22.55	.22	.05	.21	7.32	.001

Table 16

Item Statistics for Faculty

	Mean	Std. Deviation	N
Faculty during office hours	3.15	1.40	950
Faculty outside of class or office hours	2.60	1.43	950
In class, I have been singled out because of my race/ethnicity	1.99	.96	950
In class, I have been singled out because of my sex	1.73	.79	950
In class, I have heard faculty express stereotypes about: Racial/ethnic groups	2.09	.94	950
In class, I have heard faculty express stereotypes about women	2.06	.91	950
In class, I have heard faculty express stereotypes about men	2.02	.89	950

The ANOVA table indicates that there is a relationship between faculty and social integration ($F_{(1,035)} = 53.50$ and $\rho < .001$). Table 18 indicates that faculty was found to significantly contribute to the level of students' social integration (t-test value of 7.32 and $\rho <$

.001). The unstandardized beta value (b = .21) indicates for each unit change in faculty there is a .21 units change in students' social integration.

Table 17

ANOVA for Faculty and Social Integration

	Sum of Squares	Df	Mean Square	F	Sig.
Faculty	965.73	1	965.73	53.50	.000

Summary

Your First College Year survey results revealed a correlation between social integration and campus climate, gender, student services, and faculty. Social integration is a process that involves many perceptions and experiences which impact attrition, retention, and graduation rates of African American students at PWIs. The responses from the study highlight significant components involved in social integration as well as the most important experiences of African American students. These responses are the results of the data administered and recorded by Cooperative Institutional Research Program. This research study provides data results that were examined and discussed in this chapter regarding social integration as it pertains to African American students at PWIs.

Chapter 5

Summary, Conclusions, Implications, and Recommendations

Introduction

The purpose of this study was to assess the need for social integration of African

American students at PWIs. The factors that can influence social integration were by race,

gender, climate, campus services, faculty, and institution type. The study was designed to gain a

better understanding of how African American students socially integrate at PWIs. Specifically,

this study is meant to figure out how the African American students are able to socially integrate

with white students at their institution. The data to be analyzed in the study were collected from

freshmen at colleges and universities across the United States, using responses from Your First

College Year Survey (YFCY) of the Cooperative Institutional Research Program (CIRP).

Research Questions

1. What factors related to satisfaction affect students' social integration within the

   institution?

2. What factors related to campus climate affect students' social integration?

3. How does gender affect students' social integration within the institution?

4. What factors related to student services affect students' social integration?

5. What factors related to faculty affect students' social integration?

Summary of Findings

Academic and social integration have been examined in numerous studies of college

persistence for students at four-year institutions (Pascarella, 1980; Pascarella, Smart, &

Ethington, 1986; Pascarella & Terenzini, 1979) and for nontraditional students attending two-year institutions (Nora, 1987; Nora, Attinasi, & Matonak, 1990; Nora & Rendon, 1990). Nora (1993) defined social integration as follows:

> Social integration is achieved through strong affiliations within the college social environment, including less formal interaction between first-generation students and their faculty whether formal or informal is crucial to their academic success and retention. Social Integration: The development of a strong affiliation with the college social environment both in the classroom and outside of class includes interactions with faculty, academic staff, and peers but of a social nature (e.g., peer group interactions, informal contact with faculty, and involvement in organizations). (p. 237)

Tinto (1975) contends that initially students' background characteristics influence commitment to the goal of completing college. Tinto (1975) also states that specific institution ultimately determine integration and the characteristics influence commitment, but after matriculation the individual's experiences with the social and academic systems of their institution are through participation in extracurricular activities, interactions with other students, and interactions with faculty develop or maintain strong commitments to attaining a college degree. Students with strong commitments and intentions in these areas will be the most likely to persist in college, and those with weak commitments will be the most likely to withdraw (Christie & Dinham, 1991). The concepts of sense of belongings and satisfaction have been included in several models of college student persistence and retention; specifically, the concept of sense of belonging is associated with Tinto's concept of integration into the college setting (Tinto, 1993); Berger and Milem's (1997) theory of student involvement; and Bean's (1985) concepts of socialization, which is closely related to students' institutional fit and commitment.

Scholarly research conducted on college student experience and sense of belonging suggests there is a strong relationship between belonging and student persistence and ultimately student retention and graduation (Alford, 1998; Tovar, Simon, & Lee, 2009). The greater the sense of belonging to the institution, the more likely the student will remain in college (Hausmann, Schofield, & Woods, 2007; Hoffman, Richmond, Morrow, & Salomone, 2002-2003). Much of this recent work expands on the pioneering work of Astin (1993) and Tinto (1993) that is described by Pascarella and Terenzini (1995).

This study focuses on Tinto's (1993) theory of student retention, Berger and Milen's (1997) theory of student involvement, and Bean's (1985) concept of socialization. Quantitative data was used to perform the study. Quantitative data with this study produced significant findings in relation to social integration of African American students. The survey used in this study was Your First College Year (YFCY) survey developed by Cooperative Institutional Research Program (CIRP) which is associated with the Higher Education Research Institute (HERI). The survey was designed in early 1999 to measure students' curricular and co-curricular experiences since entering college and to be administered at the end of the first year. This survey was also designed to post-test several items from the Cooperative Institutional Research Program (dbfgfopasdkjsoljsdlkfjasldkfjsdlkvqwepoifnwqelfaesoifsldkjdlskvnelwkn lfdlkflk) Freshman Survey to encourage longitudinal assessment of first-year students. The Cooperative Institutional Research Program Freshman Survey is administered annually to over 400,000 incoming college freshman at more than 700 colleges and universities around the country (Hurtado, Sax, Saenz, Harper, Oseguera, Curley, Lopez, Wolf, & Arellano, 2007). The YFCY survey used a series of Likert Scale questions to determine social integration of African American students at predominantly white institutions regarding campus climate, faculty, student

services, and satisfaction. Only questions pertaining to social integration were analyzed. The researcher's initial perception was that campus climate and satisfaction would be more important to African American students than any other issues that affect college persistence.

In answering the research questions pertaining to this study, the researcher used simple regression to analyze the data. A Pearson Product-Moment correlation was also conducted to examine the correlation between the independent variables and social integration (dependent variable). An ANOVA was conducted for the research question pertaining to the gender of the students in the survey and how it determined social integration.

Factors related to satisfaction affect students' social integration within the institution

For the research question pertaining to satisfaction and social integration, a total of fifteen items were measured for satisfaction and seven items were measured for social integration. Prior to computing all variables for this study, a reliability analysis was conducted using Cronbach's alpha. The reliability coefficient for social integration .83 and for satisfaction the reliability coefficient was .85. The results for this research question indicates that there is not a strong relationship between satisfaction and social integration, but satisfaction does have an impact (r^2 = .08) on 8% of the variance. The means and standard deviation for each of the variables are displayed in Table 18.

Table 18

Means and Standard Deviation for Satisfaction

	Mean	Std. Deviation
Social Integration	25.93	4.36
Satisfaction	62.25	10.89

Factors related to campus climate that affect students' social integration

The research question pertaining to campus climate and social integration had a total of forty-seven items that were measured for social integration. Cronbach's alpha was also used to analyze to reliability. The reliability coefficient for Campus Climate was .80. The results for this research question indicates that there is not a strong relationship between campus climate and social integration, but campus climate does have an impact ($r^2 = .08$) 8% of the variance. The means and standard deviation for each of the variables are displayed in Table 19.

Table 19

Means and Standard Deviation for Campus Climate

	Mean	Std. Deviation
Social Integration	25.93	4.355
Campus Climate	79.36	12.77

Factors related to gender that affect students' social integration

The research question pertaining to gender and social integration had a total of two items that were measured for social integration. An ANOVA was performed to determine the relationship between the gender of students and social integration. The Levene's Test of Equality of Error Variance revealed that the results are not statistically significant ($\rho = .67$), therefore the equality of variances across gender in the population was not violated in this sample. As noted, the data shows that there was not a significant difference between genders. The mean for males and females were very similar. The means and standard deviation for each of the variables are displayed in Table 20.

Table 20

Means and Standard Deviation for Gender

	Mean	Std. Deviation
Male	26.45	4.38
Female	25.60	4.31

Factors related to student services that affect students' social integration

The research question pertaining to student services and social integration had a total of five items that were measured for social integration. Cronbach's alpha was also used to analyze to reliability. The reliability coefficient for student services was .53. The results for this research question indicates that there is not a strong relationship between student services and social integration, but student services does have an impact ($r^2 = .05$) 5% on the variance. The means and standard deviation for each of the variables are displayed in Table 21.

Table 21

Means and Standard Deviation for Student Services

	Mean	Std. Deviation
Social Integration	25.93	4.35
Student Services	24.28	5.08

Factors related to faculty that affect students' social integration

The research question pertaining to faculty and social integration had a total of seven items that were measured for social integration. Cronbach's alpha was also used to analyze to reliability. The reliability coefficient for student services was .72. The results for this research

question indicates that there is not a strong relationship between faculty and social integration, but student services does have an impact (r^2 = .05) 5% on the variance. The means and standard deviation for each of the variables are displayed in Table 22.

Table 22

Means and Standard Deviation for Faculty

	Mean	Std. Deviation
Social Integration	25.93	4.355
Faculty	22.55	4.57

After analyzing the data, the researcher found that even though there was not a strong relationship with any of the variables, the strongest relationship was satisfaction and campus climate. Campus climate has been one of the leading causes for African American students to leave the college without graduating (Harper, 2004).

<div align="center">Implications</div>

Tinto's view that academic and social integration influence a student's decision to persist at postsecondary institutions has been the focus of several research investigations (Christie & Dinham, 1991; Napoli & Wortman, 1996; Pascarella & Terenzini, 1991). What remains to be confirmed by the research literature in the extent to which each type of integrative experience influences persistence? The literature on social integration has produced mixed results in addressing this issue (Flowers, 2006).

The findings have a number of implications for research and interventions. First, researchers and administrators should reject an epic portrayal of African American students as socially, economically, and culturally similar, and should instead recognize that the demographic

heterogeneity of this student population promotes variation in academic achievement and psychosocial acclimation to college (Charles et al, 2008). Given our findings that satisfaction and campus climate are the leading cause for African American students to leave college, college administrators may be able to use this information to support African American students who might be at greater risk for poorer social integration. Therefore, programs need to be established to make sure that African American students are more comfortable on campus. The other variables that were analyzed are contributors to satisfaction.

Even though there are a number of researchers examining campus climate, more emphasis need to be on African American students at predominantly white institutions. Most of the campus climate research is geared towards minority students which includes sexual orientation, religion, and other ethnic groups.

To create a more inclusive environment for social integration of African American students at a PWI, the following recommendations are offered to improve the social situation for these students, as addressed and confirmed by the literature and the findings. Although most of these recommendations are initiated at some institutions, other PWIs need to actively apply these initiatives at their institution.

1. To encourage African American students to actively meet people. At the beginning of the year, the students need to introduce themselves to their professors and to administrators on campus.
2. Engage in pre-college, summer bridge, welcome week, or other events the institution have prior to the semester and the first week of school to meet students before the semester gets busy.

3. Students should attend new student orientation upon beginning their program to get to know other students and become more familiar with their program.

4. Students should also make sure they visit the institution prior to attending. There are a number of students who enroll in an institution without visiting which in some cases cause anxiety of a large campus or seeing the population on campus.

5. Administrators at PWIs should also examine the programs that are available for African American students.

6. There should be a diversity office or an office in student affairs that offer mentoring programs, student organizations, and leadership programs that focus on African American students. Having these programs will also increase the number of African American students who enter the institution each year.

Recommendations for Further Research

Although this study is a modest step in providing insight into social integration of African American students at PWIs, there a number of noteworthy recommendations. Recommendations for future research are as follows:

1. Future research should examine the role of the institutional selectivity, which has been shown to relate to college persistence for African American students (Alon & Tienda, 2005).

2. Studies should also examine African American students at historically Black colleges and universities and how they integrate within the university. In addition, if you examine African American students at HBCUs, you should also examine white students and how they socially integrate at HBCUs.

3. Research on African American students and how they socially integrate at PWIs in the different regions of the United States.

4. Compare the difference between African American students and white students and how campus climate affects social integration at PWIs.

5. Compare the difference between minority students and white students and how campus climate affects social integration at PWIs.

Conclusions

Tinto (1993) stated that college experiences such as student's major, academic performance, and amount and quality of student-faculty interactions are factored into the model of student departure as components of a student's level of academic integration in the college environment. Some of the results of this study confirmed the findings of Milem and Berger (1997) that suggested social integration has a more influential role in predicting student persistence than academic integration. Therefore, social support appears to be a major determinant of both students' satisfaction with college and their persistence at PWIs. The results of this study support the findings that satisfaction has a significant influence on the social integration of African American students. The students were satisfied with campus activities, class size, social life, and the diversity on campus. The students were also somewhat satisfied with leadership opportunities, student housing, the overall academic experience, and opportunities for community services.

Many scholars believe that campus climate for diversity has an indirect effect on student persistence (Pascarella & Terenzini, 2005); for example, Museus, Nichols, and Lambert (2008) found that campus climate affected students' goal commitment, social involvement, academic involvement, and institutional commitment. Based on their review of the literature, Pascarella

and Terenzini (2005) concluded that at certain institutions, "the effects of campus climate may be more indirect than direct, influenced by more supportive faculty and peer relations and overall educational environment" (p. 438). Perceptions of negative feelings of belonging are not limited to issues of race/ethnicity.

Campus climate was the largest data set that was analyzed for this study. When measuring campus climate, the finding confirmed that campus climate has an influence on the social integration of African American students. The findings reported that students rarely felt lonely or homesick and isolated from campus life. The findings also reported that the students sometimes socialized and had meaningful discussions with students outside of their race. The negatives in the findings were that some students did have a hostile encounter since they entered college. Some of the other variables that measured campus climate were being satisfied with the college, participating in clubs/groups, joined a social fraternity or sorority, and changing your career choice. Most of the student in this study responded yes to these questions.

Based on a synthesis of issues related to student retention, Upcraft and Gardner (1989) and Upcraft and others (1994) outlined a framework for identifying the student and institutional variables that have an impact on the odds of student success in college 1) personal characteristics (motivation, previous achievement, and intellectual ability) 2) demographic characteristics (age, gender, and race), 3) cultural characteristics (ethnic background and socioeconomic status), 4) institutional characteristics (campus site, regional location, selectivity, control, curriculum, and enrollment), and 5) institutional climate (student-faculty interaction, student activities, commuter or residential campus). The results also found that there was not a significant influence with the gender of the students and social integration.

Person and Christensen (1996) reported a study indicating that the students felt there should be institutional support services, such as tutoring, counseling, summer bridge programs, and monitoring of student programs for black students. The study also revealed that black oriented student organizations played a critical role in the lives of the black students, all felt there should be such organizations on campus and almost all were active participants in them (Person & Christensen, 1996).

The results related to student services and social integration for this study found that there was a significant influence with student services personnel and social integration. The results also showed that most students saw their academic advisors and other college personnel at least one to two times a term and some even one to two times a month. It also found that they interacted with their teaching assistants one to two times a term. The results also found that most of the students were satisfied with the academic advising and with the tutoring services on campus.

Strong predictors of integration into a college environment include formal and informal faculty-student interactions, which have been shown to significantly influence student retention and academic achievement (Pascarella & Terenzini, 1979; Nora & Rendon, 1990). In fact, one study identified relationships with faculty and peers as being among the five major keys of academic and social integration (Strage, 1999). Academic integration is achieved by means of more formal interactions with faculty, staff, and peers that are often related to educational concerns and academic content. Social integration is achieved through strong affiliations within the college social environment, including less formal interaction between first-generation students and their faculty whether formal or informal is crucial to their academic success and retention.

The results related to faculty and social integration for this study found that there is a significant influence with faculty and social integration. The finding revealed that most students met with faculty members during office hours and outside of class or office hours at least one or twice a term. The results also revealed that most students did not feel singled out because of race or gender, but the results did report that the faculty members expressed stereotypes about ethnic groups, women, and men.

In conclusion, there is a need to expand on the existing social integration literature that includes African American students. Moreover, the information on African American college students needs to be examined by gender, age, and first-generation status, and demographic region. As a follow up to this study, a qualitative investigation on second and third year students African American students should be administered to examined the difference in first-year students and students who had time a integrate within the institution. Again, this research could prove useful for administrators and deans of these institutions.

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Appendix 1

IRB Approval

From:

| Human Subjects |

To:

| Jocelyn Wilcher Vickers |

Sent:

| 06/17/11 4:37 PM |

Received:

| 06/17/11 4:38 PM |

Attachments:

Investigators Responsibilities rev 1-2011.docx

map to Ramsay offices.pdf

Dear Ms. Vickers,

Your revisions to your protocol entitled "An Examination of Factors that Affect African American Students from Socially Integrating at a Predominantly White Institution." have been reviewed. The protocol has now been approved as "Exempt " under federal regulation 45 CFR 46.101(b)(4).

This e-mail serves as official notice that your protocol has been approved. Please conduct your study at your convenience. A formal approval letter will not be sent unless you notify us that you need one.

By accepting this approval, you also accept your responsibilities associated with this approval. Details of your responsibilities are attached. Please print and retain.

Your protocol will expire on May 29, 2012 . Put that date on your calendar now. About three weeks before that time you will need to submit a final report or renewal request. (You may want to consider sending yourself a reminder e-mail to be received early next May.)

If you have any questions, please let us know.

Best wishes for success with your research!

Susan

IRB / Office of Research Compliance

155 Ramsay Hall, basement ***SEE ATTACHED MAP***

Auburn University, AL 36849

(334) 844-5966

hsubjec@auburn.edu

Appendix 2

Letter for approval to use data, Survey, and other correspondence

Gmail

Jocelyn Vickers <jlyn222@gmail.com>

HERI Data Access Approval
1 message

Linda DeAngelo <lindade@ucla.edu>
To: jlyn222@gmail.com, jlyn222@yahoo.com
Cc: serge Tran <serge.tran@ucla.edu>

Wed, Aug 11, 2010 at 6:11 PM

August 11, 2010

Dear Jocelyn,

The HERI Data Access Committee has approved your proposal entitled "An examination of factors that affect African American students from socially integrating at PWIs" Please note that in addition to the variables you requested we will be providing for you in your dataset a variable that represents the FTE percentage of students of color (non-white students) on campus. You can use this variable to determine which institutions in the dataset you consider for the purposes of your study PWIs. Your dataset will not include any HBCU institutions since by definition these institutions would not be PWIs.

Please also note the following:

1.   You are approved to conduct only the research described in your proposal. Any additional research must be applied for and approved of by the Higher Education Research Institute before any research takes place.

2.   You are responsible for obtaining local institutional research board approval for your research.

3.   We ask that you provide HERI with a copy of your research product (published paper, conference presentation, dissertation, etc.)

4.   You will be asked to sign a research agreement before we will provide you with access to the data.

 This data access is granted for a period of one year from when you actually receive the dataset. After a year, we will require a status update and will grant another year extension if necessary. After two years, your access expires. If you need to extend access at that time you must reapply for another proposal review.

6.   As a graduate student working your dissertation, the data access fee will be 500.00.

In closing, please contact Serge Tran, our Associate Director for Data Management and Analysis, to work out the details of your data access. Best of luck with your research, and we look forward to your results.

Sincerely,

Linda

https://mail.google.com/mail/?ui=2&ik=5afe76b63c&view=pt&q=heri&qs=true&search=q...   2/15/2012

--

Linda DeAngelo, PhD
CIRP Assistant Director for Research
Higher Education Research Institute
University of California, Los Angeles
3005 Moore Hall, Box 951521
Los Angeles, CA 90095-1521
Phone: 310-206-1433
Fax: 310-206-2228
www.heri.ucla.edu

HERI HIGHER EDUCATION RESEARCH INSTITUTE AT UCLA
home of the COOPERATIVE INSTITUTIONAL RESEARCH PROGRAM

Access to HERI Datasets

One of the central goals of the Higher Education Research Institute (HERI) is to facilitate the collection, distribution, and analysis of relevant data to the higher education community. As such, HERI occasionally makes data available to researchers who are not directly affiliated with the Institute. However, as an active research organization in addition to being trustee of several large datasets (such as those associated with the Cooperative Institutional Research Program), HERI feels compelled to enforce several basic rules governing access to the data in our care. Rules governing access to and use of HERI data files are described below ("Agreement for access and use of data").

AGREEMENT FOR ACCESS AND USE OF DATA

It is hereby agreed between The Regents of the University of California, on behalf of UCLA's Higher Education Research Institute (HERI), and **JOCELYN VICKERS** of **AUBURN UNIVERSITY** that the data described below will be provided to **JOCELYN VICKERS** subject to the following conditions:

DESCRIPTION OF DATASET

SPSS data file containing HERI's 2006 YOUR FIRST COLLEGE YEAR SURVEY data per request made on 07/06/2010.

CONDITIONS OF ACCESS AND USE

1. **JOCELYN VICKERS** agrees not to disclose in any way any of the data from the data files described above to any other organization or person. Only individuals under the direct supervision of **JOCELYN VICKERS** shall have access to these data. **JOCELYN VICKERS** shall maintain adequate security to protect these data from inadvertent or unauthorized access or disclosure.

2. **JOCELYN VICKERS** agrees that the data will be used solely for statistical analysis and reporting of aggregated information, and not for investigation of specific individuals or organizations. In signing this agreement, **JOCELYN VICKERS** gives assurance that such uses of statistical data will conform to widely accepted standards of practice and legal restrictions that are intended to protect the confidentiality of research subjects and participating institutions.

3. In the event that any of the conditions described above are violated, **JOCELYN VICKERS** agrees (a) to return or destroy these data and all computer files and tape files created from the original data, and (b) to indemnify UCLA, HERI, and its staff against any claims resulting from such violations.

4. **JOCELYN VICKERS** agrees to acknowledge CIRP, HERI, and UCLA in any published research. **JOCELYN VICKERS** agrees to provide HERI with two copies of all published or released research results within thirty days of publication or release.

5. This agreement will expire on **09/01/2011**. Paragraph 3(b) shall remain in force after termination. Upon expiration of this agreement, **JOCELYN VICKERS** agrees to return or destroy these data and all computer files and tape files created from the original data.

6. **JOCELYN VICKERS** agrees to pay HERI a fee of **$500** to cover material, processing, and personnel costs associated with fulfilling this request. This fee includes one hour of consulting from HERI staff. Additional consulting is available at HERI's then current rate for consulting services.

REGENTS OF THE UNIVERSITY OF CALIFORNIA

By: _____

John H. Pryor
Director, Cooperative Institutional Research Program
(CIRP)

JOCELYN VICKERS

_____
Date

8/29/2010
Date

Please return via fax or mail:
Higher Education Research Institute at UCLA
3005 Moore Hall, Box 951521
Los Angeles, CA 90095-1521
www.heri.ucla.edu
(310) 825-1925 (office)   (310) 206-2228 (fax)

Data Research Agreement 12/08

Jocelyn Vickers

From:	heridataaccess@ucla.edu
Sent:	Tuesday, August 30, 2011 1:10 PM
To:	Jocelyn Vickers
Subject:	RE: HERI Data Access

Hi Jocelyn,

Thanks for the update! Your new data access expiration date is 9/1/2012. We give extensions in one year increments. If you no longer need it after December, feel free to let us know and we will close your file.

Best,
Marcia

Quoting Jocelyn Vickers <WILCHJL@auburn.edu>:

> Good Morning,
>
> I received your email about the HERI datasets expiring on September
> 1, 2011. Can I please have an extension? If the extension is
> approved, how long can I extend it?
>
> As for any updates, I am still working on my dissertation and it
> should be completed by December. I will then send you a copy. Thanks
>
> Jocelyn Wilcher Vickers
> Coordinator II, Diversity Initiatives
> Advisor, AU Rhythm Dance Troupe
> Advisor, Ladies Society for Collegiate Success
> Advisor, AU NAACP
> 345 Foy Hall
> Auburn University, AL 36849
> wilchjl@auburn.edu
> (334) 844-3492 phone
> (334) 844-0804 fax
>
> -----Original Message-----
> From: heridataaccess@ucla.edu [mailto:heridataaccess@ucla.edu]
> Sent: Wednesday, August 24, 2011 3:46 PM
> To: Jocelyn Vickers
> Subject: HERI Data Access
>
> Dear Jocelyn,
>
> We hope that this note finds you well. We are writing in regards to
> your project titled, ?An examiniation of factors that affect African
> American students from socially integrating at PWIs.? As a
> courtesy, we would like to remind you that your first year

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> expiration date with the HERI datasets is September 1, 2011. You
> may submit, in writing or via e-mail, a request to extend your
> access to the HERI datasets for an additional year beyond this date.
> If you do not need an extension, please let us know so that we may
> close your data access file.
>
> In accordance with the HERI Data Access Agreement we are also
> writing to request updates on the progress of your research
> involving HERI datasets. As such, we would love to hear of any
> publications or presentations that may have stemmed from your
> research using CIRP data. Please send us pdf copies of any
> articles, conference materials, book chapters, etc.
>
> We at HERI look forward to serving you as a resource during the
> trajectory of your project. Please keep us abreast of any
> developments related to your CIRP related research. We wish you the
> best of luck with your research project.
>
> Sincerely,
> Marcia Fuentes
>
> CIRP Data Access Specialist
>
>

2

YOUR FIRST COLLEGE YEAR 2006 SURVEY   CIRP

Congratulations on your progress during your first college year. We are very interested in your experiences as a first-year college student. This form has been designed to provide feedback that can help improve the first-year college experience. Thank you very much for your help with this important project.

PLEASE PRINT (one letter or number per box)
Your name here helps facilitate follow-up studies to improve the college experience. All information is confidential.

NAME: FIRST _____ M I _____ LAST _____
BIRTH DATE: Month (01-12) ___ Day (01-31) ___ Year ___

EMAIL: _____

MARKING DIRECTIONS

Your responses will be read by an optical mark reader. Please,
• Use a pencil or black or blue pen.
• Fill in the oval completely.
• Erase cleanly any answer you wish to change or "X" out mark if in pen.

CORRECT MARK   INCORRECT MARKS

PLEASE PROVIDE YOUR I.D. NUMBER (as instructed) | Mark here if directed
GRP. CODE A   GRP. CODE B
FORM NO:
0-9 digit grid

1. Are you currently a full-time or part-time student?
○ Full-time   ○ Not enrolled
○ Part-time

2. What year did you first enter: (Mark one in each column)
Your 1st college / This college
2005 or 2006 .... ○○
2004 .... ○○
2003 .... ○○
2002 .... ○○
2001 or earlier .... ○○

3. Your sex:
○ Male   ○ Female

4. Is English your native language?
○ Yes   ○ No

5. Where did you primarily live while attending college this past year? (Mark one)

On Campus
Special interest housing
○ First-year student housing
○ Cultural or minority student housing
○ Single-sex housing
○ Special academic program
○ Other special interest housing
Regular college housing
○ Residence hall
○ Apartment
○ Fraternity or sorority housing
○ Other residential housing

Off Campus
○ At home with family
○ Fraternity or sorority
○ Rented apartment or house
○ Other

6. Since entering this college, how often have you interacted with the following people (e.g., by phone, e-mail, instant messenger, or in person): (Mark one for each item)

	Daily	2 or 3 times per week	Once a week	1 or 2 times per month	1 or 2 times per term	Never
Faculty during office hours	○	○	○	○	○	○
Faculty outside of class or office hours	○	○	○	○	○	○
Academic advisors/counselors	○	○	○	○	○	○
Other college personnel	○	○	○	○	○	○
Close friends at this institution	○	○	○	○	○	○
Close friends not at this institution	○	○	○	○	○	○
Your family	○	○	○	○	○	○
Graduate students/teaching assistants	○	○	○	○	○	○
Close friends from your high school	○	○	○	○	○	○

7. Are you: (Mark all that apply)
○ White/Caucasian
○ African American/Black
○ American Indian/Alaska Native
○ Asian American/Asian
○ Native Hawaiian/Pacific Islander
○ Mexican American/Chicano
○ Puerto Rican
○ Other Latino
○ Other

8. What is your current grade average (as of your most recently completed academic term)? (Mark one)
○ A (3.75 - 4.0)
○ A-, B+ (3.25 - 3.74)
○ B (2.75 - 3.24)
○ B-, C+ (2.25 - 2.74)
○ C (1.75 - 2.24)
○ C- or less (below 1.75)
○ I do not receive grades in my courses

9. Since entering this college, how often have you felt: (Mark one for each item)

	Frequently	Occasionally	Not at all
Lonely or homesick	F	O	N
Isolated from campus life	F	O	N
Unsafe on this campus	F	O	N
Worried about your health	F	O	N
That your courses inspired you to think in new ways	F	O	N
That your job responsibilities interfered with your schoolwork	F	O	N
That your family responsibilities interfered with your schoolwork	F	O	N
That your social life interfered with your schoolwork	F	O	N
Family support to succeed	F	O	N

10. How would you characterize your political views? (Mark one)
○ Far left
○ Liberal
○ Middle-of-the-road
○ Conservative
○ Far right

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11. Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself.
(Mark one for each item)

	Highest 10%	Above Average	Average	Below Average	Lowest 10%
Academic ability	○	○	○	○	○
Artistic ability	○	○	○	○	○
Computer skills	○	○	○	○	○
Cooperativeness	○	○	○	○	○
Creativity	○	○	○	○	○
Drive to achieve	○	○	○	○	○
Emotional health	○	○	○	○	○
Leadership ability	○	○	○	○	○
Mathematical ability	○	○	○	○	○
Physical health	○	○	○	○	○
Public speaking ability	○	○	○	○	○
Religiousness	○	○	○	○	○
Self-confidence (intellectual)	○	○	○	○	○
Self-confidence (social)	○	○	○	○	○
Self-understanding	○	○	○	○	○
Spirituality	○	○	○	○	○
Understanding of others	○	○	○	○	○
Writing ability	○	○	○	○	○

12. Since entering this college, how often have you:
(Mark one for each item)

	Frequently	Occasionally	Not at all
Attended a religious service	F	O	N
Felt bored in class	F	O	N
Participated in organized demonstrations	F	O	N
Tutored another student	F	O	N
Studied with other students	F	O	N
Been a guest in a professor's home	F	O	N
Smoked cigarettes	F	O	N
Drank beer	F	O	N
Drank wine or liquor	F	O	N
Felt overwhelmed by all you had to do	F	O	N
Felt depressed	F	O	N
Performed volunteer work	F	O	N
Discussed politics:			
In class	F	O	N
With friends	F	O	N
With family	F	O	N
Played a musical instrument	F	O	N
Worked on a local, state, or national political campaign	F	O	N
Socialized with someone of another racial/ethnic group	F	O	N
Come late to class	F	O	N
Discussed religion	F	O	N
Used the Internet for research/homework	F	O	N
Performed community service as part of class	F	O	N
Used a personal computer	F	O	N
Maintained a healthy diet	F	O	N
Missed school because of illness	F	O	N
Slept 8 or more hours a day	F	O	N

13. Please rate your satisfaction with this institution on each of the aspects of college life listed below.
(Mark one for each item)

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Can't Rate/ No Experience
Your overall academic experience	○	○	○	○	○	○
Classroom facilities	○	○	○	○	○	○
Computer facilities/labs	○	○	○	○	○	○
Library facilities and services	○	○	○	○	○	○
Quality of computer training/assistance	○	○	○	○	○	○
Availability of Internet access	○	○	○	○	○	○
Academic advising	○	○	○	○	○	○
Tutoring or other academic assistance	○	○	○	○	○	○
Student housing facilities	○	○	○	○	○	○
Student housing office/services	○	○	○	○	○	○
Financial aid office	○	○	○	○	○	○
Student health services	○	○	○	○	○	○
Psychological counseling services	○	○	○	○	○	○
Recreational facilities	○	○	○	○	○	○
Orientation for new students	○	○	○	○	○	○
Leadership opportunities	○	○	○	○	○	○
Opportunities for community service	○	○	○	○	○	○

14. Since entering this college, how has it been to:
(Mark one for each item)

	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult
Understand what your professors expect of you academically	○	○	○	○
Develop effective study skills	○	○	○	○
Adjust to the academic demands of college	○	○	○	○
Manage your time effectively	○	○	○	○
Get to know faculty	○	○	○	○
Develop close friendships with male students	○	○	○	○
Develop close friendships with female students	○	○	○	○
Develop close friendships with students of a different racial/ethnic group	○	○	○	○
Utilize campus services available to students	○	○	○	○

15. Indicate the importance to you personally of each of the following:
(Mark one for each item)

	Essential	Very Important	Somewhat Important	Not Important
Becoming accomplished in one of the performing arts (acting, dancing, etc.)	E	V	S	N
Becoming an authority in my field	E	V	S	N
Obtaining recognition from my colleagues for contributions to my special field	E	V	S	N
Influencing the political structure	E	V	S	N
Influencing social values	E	V	S	N
Raising a family	E	V	S	N
Having administrative responsibility for the work of others	E	V	S	N
Being very well off financially	E	V	S	N
Helping others who are in difficulty	E	V	S	N
Making a theoretical contribution to science	E	V	S	N
Writing original works (poems, novels, short stories, etc.)	E	V	S	N
Creating artistic work (painting, sculpture, decorating, etc.)	E	V	S	N
Becoming successful in a business of my own	E	V	S	N
Becoming involved in programs to clean up the environment	E	V	S	N
Developing a meaningful philosophy of life	E	V	S	N
Participating in a community action program	E	V	S	N
Helping to promote racial understanding	E	V	S	N
Keeping up to date with political affairs	E	V	S	N
Becoming a community leader	E	V	S	N
Integrating spirituality into my life	E	V	S	N
Improving my understanding of other countries and cultures	E	V	S	N

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16. Please indicate the extent to which you agree or disagree with the following statements: (Mark one for each item)

Columns: Strongly Agree | Agree | Disagree | Strongly Disagree

In class, I have been singled out because of my:
- Race/ethnicity .... ○○○○
- Sex .... ○○○○

In class, I have heard faculty express stereotypes about:
- Racial/ethnic groups .... ○○○○
- Women .... ○○○○
- Men .... ○○○○

The admission/recruitment materials portrayed this campus accurately .... ○○○○

I see myself as part of the campus community .... ○○○○

Faculty here is interested in students' academic problems .... ○○○○

Faculty here is interested in students' personal problems ..... ○○○○

Staff here is interested in students' academic problems ...... ○○○○

Staff here is interested in students' personal problems .... ○○○○

There is a lot of racial tension on this campus .... ○○○○

I feel like I am just another number on this campus .... ○○○○

There is strong competition among most of the students for high grades .... ○○○○

I feel a sense of belonging with this college .... ○○○○

17. To what extent have you experienced the following with students from a racial/ethnic group other than your own? (Mark one for each item)

Columns: Very Often | Often | Sometimes | Seldom | Never

- Dined or shared a meal .... ○○○○○
- Had meaningful and honest discussions about race/ethnic relations outside of class .... ○○○○○
- Had guarded, cautious interactions .... ○○○○○
- Shared personal feelings and problems .... ○○○○○
- Had tense, somewhat hostile interactions .... ○○○○○
- Had intellectual discussions outside of class .... ○○○○○
- Felt insulted or threatened because of race/ethnicity...... ○○○○○
- Studied or prepared for class .... ○○○○○
- Socialized or partied .... ○○○○○
- Attended events sponsored by other racial/ethnic groups.. ○○○○○

18. Please rate your satisfaction with this institution on each of the aspects of college life listed below. (Mark one for each item)

Columns: Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Can't Rate/No Experience

- Amount of contact with faculty...................... ○○○○○○
- Class size .... ○○○○○○
- Interaction with other students .... ○○○○○○
- Relevance of coursework to everyday life .... ○○○○○○
- Relevance of coursework to future career plans ...... ○○○○○○
- Overall quality of instruction .... ○○○○○○
- Respect for the expression of diverse beliefs .... ○○○○○○
- Availability of campus social activities............... ○○○○○○
- Your social life...................................... ○○○○○○
- Overall sense of community among students .... ○○○○○○
- Overall college experience .... ○○○○○○

19. Since entering this college have you: (Mark all that apply)

- ○ Decided to pursue a different major
- ○ Changed your career choice
- ○ Participated in student government
- ○ Worked full-time while attending school
- ○ Joined a social fraternity or sorority
- ○ Played varsity/intercollegiate athletics
- ○ Participated in student protests or demonstrations
- ○ Participated in volunteer or community service work
- ○ Participated in student clubs/groups
- ○ Sought personal counseling
- ○ Strengthened your religious beliefs/convictions
- ○ Failed one or more courses
- ○ Participated in leadership training
- ○ Communicated regularly with your professors
- ○ Enrolled in an honors or advanced course
- ○ Enrolled in a remedial or developmental course
- ○ Transferred from another institution
- ○ Been satisfied with this college
- ○ Enrolled in a formal program where a group of students take two or more courses together (e.g., FIG, learning cluster, learning community, linked courses)
- ○ Taken a college course or freshman seminar designed to help first-year students adjust to college
- ○ Joined a pre-professional or departmental club
- ○ Participated in an academic enrichment/support program

20. Since entering this college, indicate how often you: (Mark one for each item)

Columns: Frequently (F) | Occasionally (O) | Not at all (N)

- Turned in course assignment(s) late .... Ⓕ Ⓞ Ⓝ
- Spoke up in class .... Ⓕ Ⓞ Ⓝ
- Discussed course content with students outside of class .... Ⓕ Ⓞ Ⓝ
- Skipped class .... Ⓕ Ⓞ Ⓝ
- Received tutoring .... Ⓕ Ⓞ Ⓝ
- Worked on a professor's research project ... Ⓕ Ⓞ Ⓝ
- Turned in course assignments that did not reflect your best work .... Ⓕ Ⓞ Ⓝ
- Participated in intramural sports .... Ⓕ Ⓞ Ⓝ
- Had difficulty getting along with your roommate(s)/housemate(s) .... Ⓕ Ⓞ Ⓝ
- Received from professor:
  - Advice or guidance about your educational program .... Ⓕ Ⓞ Ⓝ
  - Emotional support or encouragement ..... Ⓕ Ⓞ Ⓝ
  - Negative feedback about your academic work .... Ⓕ Ⓞ Ⓝ
- Witnessed academic dishonesty/cheating ... Ⓕ Ⓞ Ⓝ
- Went home for the weekend .... Ⓕ Ⓞ Ⓝ
- Worked with an academic advisor to select your courses .... Ⓕ Ⓞ Ⓝ
- Received advice/counseling from another student .... Ⓕ Ⓞ Ⓝ
- Fell asleep in class .... Ⓕ Ⓞ Ⓝ
- Had difficulty enrolling in the courses you need . Ⓕ Ⓞ Ⓝ

3

21. Compared with when you _entered_ this college, how would you now describe your:
(Mark _one_ for each item)

	Much Stronger	Stronger	No Change	Weaker	Much Weaker
General knowledge	○	○	○	○	○
Knowledge of a particular field or discipline	○	○	○	○	○
Knowledge of people from different races/cultures	○	○	○	○	○
Understanding of the problems facing your community	○	○	○	○	○
Understanding of national issues	○	○	○	○	○
Ability to conduct research	○	○	○	○	○
Ability to work as part of a team	○	○	○	○	○
Critical thinking skills	○	○	○	○	○
Analytical/problem-solving skills	○	○	○	○	○

22. Do you have any concern about your ability to finance your college education? (Mark _one_)

○ None (I am confident that I will have sufficient funds)
○ Some (but I probably will have enough funds)
○ Major (not sure I will have enough funds to complete college)

23. Since entering this college, how much time have you spent during a typical week doing the following activities?
(Mark _one_ for each item)

Hours Per Week

	None	Less than 1 hour	1 - 2	3 - 5	6 - 10	11 - 15	16 - 20	Over 20
Attending classes/labs	○	○	○	○	○	○	○	○
Studying/homework	○	○	○	○	○	○	○	○
Socializing with friends	○	○	○	○	○	○	○	○
Exercising or sports	○	○	○	○	○	○	○	○
Partying	○	○	○	○	○	○	○	○
Working (for pay) on campus	○	○	○	○	○	○	○	○
Working (for pay) off campus	○	○	○	○	○	○	○	○
Student clubs and groups	○	○	○	○	○	○	○	○
Watching TV	○	○	○	○	○	○	○	○
Household/childcare duties	○	○	○	○	○	○	○	○
Reading for pleasure	○	○	○	○	○	○	○	○
Playing video/computer games	○	○	○	○	○	○	○	○
Prayer/meditation	○	○	○	○	○	○	○	○
Commuting	○	○	○	○	○	○	○	○

24. If you could make your college choice over, would you still choose to enroll at your current (or most recent) college?
(Mark _one_)

○ Definitely yes
○ Probably yes
○ Probably no
○ Definitely no
○ Not sure yet

25. What do you think you will be doing in Fall 2006?
(Mark _one_)

○ Attending your current (or most recent) institution
○ Attending another institution
○ Not attending any institution

26. Think back over the past two weeks. How many times in the past two weeks, if any, have you had five or more alcoholic drinks in a row? (A drink can be a 12-ounce beer or wine cooler, a 4-ounce glass of wine, or a shot of liquor either straight or in a mixed drink.)

○ None
○ Once
○ Twice
○ 3-5 times
○ 6-9 times
○ 10 or more times

27. During the past year did you participate in or receive any of the following? (Mark _all_ that apply)

○ A discussion with a parent or guardian about alcohol before attending college
○ An on-line alcohol education program sponsored by your college
○ A live presentation about alcohol by college officials
○ A live presentation about alcohol by college students
○ Small group discussions about alcohol
○ Written material about alcohol from your college
○ Other alcohol education program
○ No alcohol education program

28. Do you give the Higher Education Research Institute at UCLA permission to include your ID number should your college request the data for additional research analyses?

○ Yes   ○ No

The remaining ovals are provided for additional questions that may be supplied by your institution.

29. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	44. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
30. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	45. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
31. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	46. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
32. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	47. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
33. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	48. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
34. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	49. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
35. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	50. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
36. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	51. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
37. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	52. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
38. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	53. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
39. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	54. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
40. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	55. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
41. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	56. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
42. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	57. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
43. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	58. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

Thank You!

DO NOT WRITE IN THIS AREA

4

Appendix 3

List of Institutions used in the Survey

Number	Institution	State of Institution
1	Abilene Christian University	TX
2	Adelphi University	NY
3	Albertus Magnus College	CT
4	American University	DC
5	Aurora University	IL
6	Austin Peay State University	TN
7	Babson College	MA
8	Bard College	NY
9	Bates College	ME
10	Bentley University	MA
11	Bucknell University	PA
12	California State University-Channel Islands	CA
13	Campbell University Inc	NC
14	Carlow University	PA
15	Carthage College	WI
16	Cazenovia College	NY
17	Centenary College	NJ
18	Centenary College of Louisiana	LA
19	Central College	IA
20	Chadron State College	NE
21	Charleston Southern University	SC
22	Colby College	ME
23	College of Santa Fe	NM
24	Colorado State University	CO
25	Columbia College-South Carolina	SC
26	Creighton University	NE
27	CUNY Bernard M Baruch College	NY
28	CUNY Hunter College	NY
29	CUNY Medgar Evers College	NY
30	Daemen College	NY
31	Denison University	OH
32	East Texas Baptist University	TX
33	Elon University	NC
34	Emmanuel College	MA
35	Fairfield University	CT
36	Fordham University	NY
37	Gannon University	PA
38	Grace College and Theological Seminary	IN

Number	Institution	State of Institution
39	Grand Valley State University	MI
40	Heidelberg University	OH
41	Hendrix College	AR
42	Hilbert College	NY
43	Hollins University	VA
44	Immaculata University	PA
45	Iowa Wesleyan College	IA
46	Johnson & Wales University-Providence	RI
47	Judson University	IL
48	Laguna College of Art and Design	CA
49	Lawrence Technological University	MI
50	Lawrence University	WI
51	Lehigh University	PA
52	Lewis & Clark College	OR
53	Loyola Marymount University	CA
54	Manhattan College	NY
55	Marymount College	CA
56	Menlo College	CA
57	Mercer Univ-Macon	GA
58	Miami University-Oxford	OH
59	Millikin University	IL
60	Monmouth University	NJ
61	Montserrat College of Art	MA
62	Moravian College and Moravian Theological Seminary	PA
63	Mount Olive College	NC
64	Mount St Mary's College	CA
65	Mount Vernon Nazarene University	OH
66	Nevada State College	NV
67	North Central College	IL
68	North Dakota State University-Main Campus	ND
69	Northern Illinois University	IL
70	Northwest Missouri State University	MO
71	Northwest Nazarene University	ID
72	Notre Dame College	OH
73	Oberlin College	OH
74	Occidental College	CA
75	Ohio Dominican University	OH
76	Oklahoma Baptist University	OK
77	Point Loma Nazarene University	CA
78	Post University	CT
79	Principia College	IL
80	Radford University	VA
81	Randolph College	VA
82	Rensselaer Polytechnic Institute	NY
83	Rider University	NJ
84	Rochester Institute of Technology	NY
85	Rockford College	IL
86	Rowan University	NJ

Number	Institution	State of Institution
87	Sacred Heart University	CT
88	Saint Marys College of California	CA
89	Sarah Lawrence College	NY
90	Scripps College	CA
91	Seton Hall University	NJ
92	Smith College	MA
93	Sonoma State University	CA
94	Southern Methodist University	TX
95	Southern New Hampshire University	NH
96	SUNY Institute of Technology at Utica-Rome	NY
97	Sweet Briar College	VA
98	Tennessee Temple University	TN
99	Texas Christian University	TX
100	The College of Wooster	OH
101	University of Arkansas-Fort Smith	AR
102	University of Central Missouri	MO
103	University of Massachusetts-Lowell	MA
104	University of Nebraska at Omaha	NE
105	University of Notre Dame	IN
106	University of Toledo	OH
107	Virginia Commonwealth University	VA
108	Washington and Lee University	VA
109	Washington College	MD
110	Wells College	NY
111	Wesleyan College	GA
112	West Texas A & M University	TX
113	West Virginia University	WV
114	Western New England College	MA
115	Whitman College	WA
116	Worcester State College	MA
117	Youngstown State University	OH