Perceptions of a Prejudiced Campus: Institutional Antecedents and Personal Consequences for African-American Students

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PERCEPTIONS OF A PREJUDICED CAMPUS: INSTITUTIONAL ANTECEDENTS AND PERSONAL CONSEQUENCES FOR AFRICAN-AMERICAN STUDENTS

by

Brenda Taylor King

A Dissertation
Submitted to the
Faculty of The Graduate College
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Western Michigan University
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PERCEPTIONS OF A PREJUDICED CAMPUS: INSTITUTIONAL ANTECEDENTS AND PERSONAL CONSEQUENCES FOR AFRICAN-AMERICAN STUDENTS

Brenda Taylor King, Ph.D.
Western Michigan University, 2002

The present research consists of two studies designed to (a) identify those institutional characteristics that African-American students, themselves, consider to evaluate the campus environment of predominately White colleges and universities (PWCUs), and (b) examine the relationship between African-American students' perceptions of the campus environment at a PWCU (based on institutional characteristics) and their expectations of quality of life and academic achievement. In Study One, African-American and White students at Western Michigan University and high school seniors at two public high schools completed the Campus Climate Survey, designed to identify the institutional characteristics to which African-American students spontaneously attend when forming impressions of the campus environment at predominately White colleges and universities (PWCUs). In Study Two, African-American and White participants read about a PWCU described in terms of those characteristics as having a favorable, unfavorable, or neutral campus environment. After reading the description, participants reported their expected quality of life and academic performance at that PWCU. I found a significant difference between the expected outcomes of White and African-American students. The favorableness of the campus environment did not influence White students’
expectations regarding social integration and academic performance. African-American students, however, expected higher levels of social integration and better academic performance at the PWCU with a more favorable campus environment.
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Brenda Taylor King
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Overview of the Significance and Specific Aims of the Present Research

In the aftermath of the Civil Rights Movement, minority students gained access to predominately White colleges and universities (PWCUs) through federally mandated Affirmative Action policies and self-imposed diversity initiatives. As increasing numbers of minority students enrolled in PWCUs, social scientists began to systematically investigate questions about the quality of life experienced by minority students (e.g., social integration), as well as the level of academic achievement attained by minority students (e.g., grade point average, graduation rate). The results of such studies have consistently revealed a disturbing social problem: African-American students at PWCUs experience a lower quality of life and poorer academic achievement relative to White students or minority students at colleges or universities established to meet the needs of minorities (Goldman & Hewitt, 1976; Gosman, Dandridge, Nettles, and Thoeny, 1983; Nettles, 1988; Allen & Haniff, 1991).

To better understand the problems that minority students experience at PWCUs, researchers have traditionally focused on variables associated with minority students that might contribute to their difficulties such as academic preparedness (e.g., high school preparation, study habits), socioeconomic status, self-esteem, and coping skills (Hurtado, 1992). By trying to locate the source of their difficulties in the minority students themselves, researchers have essentially attempted to answer the
question, "What is wrong with minority students, that they cannot succeed at PWCUs?" Studies have shown that individual factors influence the college experiences of minorities. However, individual factors alone cannot explain the following:

1. The difficulty experienced by some minority students at PWCUs who possess precisely those characteristics associated with success — higher levels of academic preparedness, socioeconomic status, and academic self-efficacy (Hurtado, 1994; Steele, 1999); and

2. The apparent success of minorities at historically Black colleges and universities (HBCUs), Hispanic Serving Institutions (HSIs), or tribal colleges who are typically less well prepared and of a lower social class than those students who attend PWCUs (Fleming, 1984; Allen, 1998; American Indian College Fund, 2000).

More recently, researchers have begun to change the way they address the problems that minority students experience at PWCUs. Rather than locating the source of those problems in the minority students, researchers have begun to focus on social/environmental variables associated with PWCUs that might contribute to the problems minority students experience. Researchers have essentially begun to ask the question. "What is wrong with PWCUs that minority students cannot attain the same quality of life or level of academic achievement as Whites or minorities at predominately minority colleges or universities?"
Accordingly, several recent studies suggested that the extent to which the campus fosters a positive “racial climate” (i.e., embraces diversity among students, faculty and staff) plays an important role in determining quality of life and academic achievement for minority students (e.g., Cabrera, Nora, & Terenzini, 1999; Fleming & Morning, 1998; Hurtado, 1992; Hurtado, 1994; Murgia, Padilla, & Pavel, 1991; Nora & Cabrera, 1996; Zea, Riesen, & Beil, 1997; Hurtado, Milem, & Clayton-Pedersen, 1999).

Furthermore, researchers have identified a number of institutional characteristics that are related to minority students’ quality of life and academic achievement (Tracey & Seldacek, 1987; Hurtado, 1994; Person & Christensen, 1996; Hurtado, Milem, Clayton-Pedersen & Allen, 1998; Strage, 1999). Examples of such characteristics include the racial composition of the institution (Fleming, 1984; Allen, 1992; Freeman, 1998), exposure to minority perspectives (Feagin, 1992; Hurtado, 1992), location (Hurtado, 1994; Parker, 1998; Roach, 1999), the incidence of racism (Sedlacek, 1987, 1999; Feagin, 1992; Hurtado, 1992; Powell, 1998; Cabrera et al., 1999), the extent to which the environment is supportive (nature of faculty-student and staff-student interaction) (Stewart, Russell, & Wright, 1997; Taylor & Olswang, 1997), opportunities for mentoring and academic support, and social and intellectual activities that reflect one’s culture (Allen & Haniff, 1991; Allen, 1992). Presumably, these characteristics are also related to minority students’ perceptions of the racial climate because of their potential to affect how minority students are treated.
An important limitation of the existing research on racial climate is that it has not identified the institutional characteristics that minority students spontaneously consider to evaluate the campus environment of an institution. Furthermore, the existing literature has not examined how minority students’ perceptions of campus environment influence their expected quality of life or their expected academic achievement at a PWCU. Thus, the present research consists of two studies designed to (a) identify those institutional characteristics that African-American students, themselves, consider to evaluate the campus environment of PWCU, and (b) examine the relationship between African-American students' perceptions of the campus environment at a PWCU (based on institutional characteristics) and their expectations of quality of life and academic achievement.

In Study 1, African-American and White students at Western Michigan University and college bound seniors at two public high schools completed a survey in which they (a) rated the extent to which they used 22 institutional characteristics (derived from the literature) to evaluate the favorableness of the campus environment, and (b) listed other institutional characteristics they would use to evaluate the campus environment. The results from Study 1 make a novel contribution by identifying institutional characteristics that African-American students spontaneously consider in evaluating the quality of the campus environment at a PWCU as well the significance of those characteristics in determining enrollment decisions.
Study 2 was designed to address the relationship between African-American students' perceptions of the campus environment at a PWCU (based on institutional characteristics) and their expectations of quality of life and academic achievement. Accordingly, based on the results of Study 1, I used the institutional characteristics that African-American students spontaneously considered to evaluate the favorableness of the campus environment to create favorable, unfavorable, or neutral "campus profiles" of PWCUs. Then, a separate sample of students (both White and African-American) were randomly assigned to read one of the three campus profiles and indicate the extent to which they would feel comfortable at that university, and predict their performance on a number of academic achievement measures if they were students at that institution. Study 2 tested the hypothesis that campus environment will indirectly affect African-American students' expected academic performance through its impact on expected academic integration and expected quality of life.

The results from Study 2 contribute to our understanding of how African-American students' perceptions of campus environment influence their expectations of quality of life and academic performance. My research demonstrates how certain institutional characteristics influence African-American students' expected outcomes. Given research findings that actual outcomes are related to expected outcomes (Bandura, 1977; Eccles, 1994; Harrison, Rainer, & Hochwarter, 1997; Lenney, 1977), the present research suggests important characteristics that administrators at PWCUs
should address in order to enhance both the comfort level and likelihood of academic success of African-Americans at PWCUs.
The Problem: The Experience of African-American Students at PWCUs

African-American students at PWCUs do not do as well as White students. They earn lower grades, take longer to graduate, have lower persistence rates, pursue fewer graduate degrees and experience more psychological adjustment problems (Allen, 1992; Goldman & Hewitt, 1976; Gosman, Dandridge, Nettles, and Thoeny, 1983; Nettles, 1988). While this has always been the pattern, Smedley, Myers and Harrell (1993) maintain that "since the early 1980s... there has been a disturbing regressive trend in the... academic performance... of African-American and other minority students attending predominantly White colleges" (p. 434). By contrast, African-Americans who attend HBCUs fare better than those who attend PWCUs on all the measures indicated above. "They experience higher intellectual gains and have a more favorable psychosocial adjustment, a more positive self-image, stronger racial pride, and higher aspirations" (Wilson, 1998, p. 9). This is true in spite of being relatively disadvantaged in terms of high school preparation, college entrance tests, socioeconomic status, and parental education—factors that are predictive of college performance (Allen, 1992; Allen, Epps, & Haniff, 1991; Fleming, 1984; Flowers & Pascarella, 1999; Nettles 1988).2 Understandably, this raises real concern regarding the academic achievement of African-Americans at PWCUs, particularly since a larger number of African-Americans are attending such institutions.
Whites earn higher grades than African-Americans (Allen et al., 1991; Allen, 1992, Smedley et al., 1993). Goldman and Hewitt (1976) note that the mean GPAs of Blacks (2.52) lagged behind that of Whites (2.89) at the University of California at Los Angeles. The same pattern was found in studies of academic performance of non-Asian minorities and Whites at the University of Michigan (Allen, 1988a; 1992), Indiana University at Bloomington (Bennett & Okinaka, 1990), and at the University of North Carolina, Arizona State University, Memphis State University, the State University of New York, Stony Brook, University of Wisconsin, and Eastern Michigan University (Allen, 1992). In a study of a large Midwestern predominately White institution, Smedley et al. (1993) found that this pattern persisted even though the mean SAT scores of the African-Americans were considerably higher than the national average. While some studies dealt with baccalaureate students in general (Allen, 1992; Smedley et al., 1993), other studies have found that academic achievement of African-American students on predominately White campuses suffers regardless of major (Allen, 1988b, 1992; Fleming & Moming, 1998; Olivas, 1986).

Academic performance is simply one of the problems faced by African-American students enrolled in PWCUs. They also lag behind Whites in graduation rates (Carter & Wilson, 1991; Kidwell, 1994; Durán, 1994). At the University of Michigan, attrition rates for African-Americans (38 percent) exceeded those of Whites (23 percent) and Asians (21 percent). Consequently, a higher percentage of Whites graduate (37 percent) relative to Blacks (30 percent) (Allen, 1988a). When examining persistence to graduation and attrition rates at PWCUs as a whole, sixty-
six percent of African-Americans who attend PWCUs fail to persist until graduation. Additionally, their attrition rates are five to eight times greater than the attrition rates of Whites on their campuses (Allen, 1988a; Deskins, 1991).

By contrast, those African-Americans who attend HBCUs have higher levels of persistence and academic achievement than African-Americans who attend PWCUs (Fleming, 1984; Pascarella & Terenzini, 1991). Additionally, such students have higher baccalaureate graduation rates. In the late 1980s, less than 25 percent of African-Americans attended HBCUs; yet, those universities accounted for 40 percent of baccalaureate graduates (D'Augelli & Hershberger, 1993). Of the ten colleges and universities that awarded the most baccalaureate degrees to African-Americans in 1989, eight were public HBCUs. In 1992, 28 percent of African-American college students attended HBCUs, and HBCUs awarded 27.6 percent of all baccalaureate degrees earned by African-Americans (Carter & Wilson, 1994, as cited in Powell, 1998). In 1993, HBCUs awarded 28.4 percent of all baccalaureate degrees earned by African-Americans (Carter, 1996). Collectively, these findings suggest that HBCUs are more successful with African American students than are PWCUs.

Not only do African-Americans at HBCUs earn better grades and have higher graduation rates, they also pursue graduate education to a much greater extent than do African-Americans who graduate from PWCUs (Brazziel, 1983; Wenglinsky, 1996). According to Wenglinsky (1996), African-Americans who attend HBCUs are more likely to pursue graduate and professional education than African-Americans at PWCUs. Allen (1998) found that a higher percentage of those at HBCUs pursued a
PhD. It should be noted, however, that fewer of them pursue prestigious professions such as medicine and law.

In summary, African-Americans find themselves at a relative disadvantage in comparison to Whites at PWCUs. They earn lower grades, progress toward degrees more slowly, earn fewer baccalaureate degrees, and pursue fewer graduate degrees. Thus, their academic performance suffers even though they are bright students (Hurtado, 1994). This raises the question, “Why do African-American students underachieve at predominately White colleges and universities?” Two categories of explanations have been offered, student-centered explanations and institution-centered explanations.

*Student-Centered Explanations: “What’s Wrong With African-American Students?”*

Researchers who provide student-centered explanations suggest that something is wrong with the African-American student. They have focused primarily on the individual factors such as (a) academic ability/preparedness, (b) the role of socioeconomic status, and (c) personality variables, suggesting that the African-American students arrive on PWCU campuses with deficits that adversely affect both their quality of life and their academic performance.

*Academic Preparation.* Colleges and universities use ACT or SAT scores as one criterion in their admissions selection process. Use of such tests has traditionally been predicated on their ability to predict the likelihood of success in college. One would expect that, all other things being equal, those students who score higher on the college admissions test will be more successful in college. In recent years, people
have questioned the validity of these tests. Wolfe & Johnson (1995), for example, argued that the predictive validity of the SAT has decreased, and that this is especially true for highly selective colleges and universities. Others have questioned the validity of these tests for predicting the academic performance of minorities in particular (Durán, 1994; Durán, 1996; Fleming & Morning, 1998). Nettles et al (1986) found that together, the college entrance test and high school grade point average explain approximately 25% of the variance in academic performance (Wolfe & Johnson, 1995). Allen & Haniff (1991) found that college entrance exams were not predictive of academic performance; instead, high school grade point average, followed by race and racial composition of the campus, predicted academic performance of African-American students.

A gap clearly exists between the college entrance scores of Whites and non-Asian minorities. African-Americans, Hispanics, and American Indians score lower than Whites on both the SAT and ACT tests. In 1990, 20,000 American Indians took the SAT. Their average score on the verbal and math portions was 338 and 437 respectively. For the same year, the national average was 424 and 476 respectively. American Indians' average composite ACT was 18; the national average was 20.6 (Kidwell, 1994). Eight years later, the average total SAT score for American Indians was 963. The national average was 1017 (The College Board, 1998). It is important to note, however, that the mean score for Whites (1054) is above the national average. Thus, the gap is even wider between the scores of American Indians and Whites. The same pattern exists with recent ACT scores: whereas Whites who enrolled in the
freshman class of 1997 have an average composite ACT of 22.4, American Indians' average composite ACT was 20.2 (American College Testing Program (ACT), 1998).

African-American students also perform more poorly than Whites on the SAT. In 1998, the gap in the mean score between Whites and African-Americans was 194 points. This represents a much greater gap than existed in 1988 in spite of a slight improvement in the scores of African-Americans. Whereas the mean SAT of African-Americans was 847 in 1988, it was 860 in 1998 (The College Board, 1998). However, the mean SAT score for Whites was 1036 in 1988 and 1054 in 1998, signaling an increase in the gap. African-Americans' performance on the ACT parallels that on the SAT. African-American freshmen in 1997 had an average composite ACT of 17.7 whereas White freshmen averaged 22.4 (ACT, 1998).

Duran, in reviewing tests scores from 1969 to 1992, notes that "Hispanic test takers score well below White test takers...[and that] only a modest decrease in the gap [has occurred] over the past 10 years" (Shea, 1992). Of those Hispanics who enrolled as Freshmen in 1997, the average composite ACT ranged from 19.8 for Mexican Americans to 20.2 for other Hispanics (ACT, 1998). In 1998, the mean SAT scores for Hispanics ranged from 899 for Puerto Ricans to 913 for Mexican Americans. Therefore, even their best performance leaves a gap of 141 points in comparison to the mean score for Whites.

Whites, then, outperform non-Asian minorities on the college admissions tests. Their better performance, however, is a function of their relative advantage on every factor known to influence college admissions test performance: parental
education, parental income, educational resources in the home, access to admissions test coaching, and quality of schooling (Goldsby, 1993, as cited in Freeman, 1998).

As a whole, minorities who take the SAT are disadvantaged by their parents' educational backgrounds. "Nationwide, for students of all races, those whose parents are college graduates have a mean composite SAT score that is 105 points higher than the mean score of students whose parents have a high school diploma only" (The Journal of Blacks in Higher Education (JBHE) (Winter 1998/1999). Whereas 58 percent of Whites who took the SAT in 1998 had a parent who was a college graduate, this was true of only 36 percent of the African-American students (JBHE, Winter 1998/1999). Even African-American students whose parents earn at least $75,000 annually are more likely than Whites from the same income category to be first generation college students (JBHE, Summer 1998). As in the case of African-Americans, Hispanic parents also have lower levels of education: the median number of years of education completed for Hispanic fathers is 12.0, for mothers, 11.8. By contrast, White fathers and mothers have completed an average of 14.3 and 13.5 years respectively. American Indian college students are just as likely to be first generation college students. As a result, many non-Asian minority students cannot receive the same level of assistance from their parents as White students in preparing for the SAT.

Parental income is closely related to parental education. As is true of the parents' educational levels, studies suggest that family income also contributes to a student's SAT scores. Students whose families have incomes of more than $100,000
score about 168 points higher than those whose family income is between $20,000 and $30,000 and 115 points above those with family incomes between $40,000 and $50,000. Again, non-Asian minorities are at a disadvantage. More than one half of all African-American SAT test takers come from families whose income is less than $30,000 (JBHE, Winter, 1998/1999). Only 16 percent of all White SAT test takers come from families with incomes of $30,000 or less (JBHE, Winter, 1998/1999). Given their lower incomes, African-American parents are far less able to provide the kinds of resources that will facilitate better performance on college admissions tests. For example, their homes are less likely to be equipped with educational resources such as reference tools or technological aids such as computers and internet access. Consequently, these students are at a disadvantage relative to their White counterparts.

Parental income is also related to the quality of education that students receive. Quality of education is a function of the caliber of schools that minorities attend, typically urban and public. Specifically, they lack the resources needed to provide a competitive education. Instead, urban public schools typically have inadequate facilities, less qualified teachers, and less than adequate funding and technology (Kozol, 1991; Reinstein, 1997/98). As a result, minorities enter PWCUs unprepared for the academic challenges they will face.

The high school curriculum that minorities pursue also affects the quality of education they receive. American Indians, African-Americans, and Hispanics are more likely to attend schools that offer a less challenging curriculum, and they are
less likely to enroll in a college-preparatory curriculum. As a result, these students are not as well prepared for college. In 1994 fewer African-Americans, American Indians, and Hispanics took academically challenging courses than did Whites. Whereas 7.3 percent of White high school students took AP calculus, only 2.0 percent Blacks, 4.6 percent Hispanics, and 2.2 percent American Indians completed the course (National Center for Education Statistics [NCES], 1999). When the percentage of students who took Calculus instead of AP Calculus is added, 16.9, 5.8, 10.6, and 6.0 percent of Whites, Blacks, Hispanics, and American Indians respectively completed a year of Calculus. Thus, Whites were about 2½ times more likely to take a Calculus course than Blacks and American Indians (NCES, 1999). In 1998, the gap between Whites and Blacks widened: 25 percent of Whites who took the SAT had taken calculus, but only 13 percent of Blacks had done so. In 1994, more Whites completed each AP science course (Biology, Chemistry, and Physics) as well. The percentage gap ranged from .7 to 2.9 for AP Biology, 1.5 to 3.7 for AP Chemistry, and .7 to 2.2 for AP Physics when compared to Hispanics and American Indians respectively.4 When comparing the number of students in each racial category who took the minimal level of courses for college-bound students recommended by The National Commission on Excellence in Education, the pattern holds except for Hispanics, 27.7 percent of whom took the recommended courses.5 By comparison, 26.5 percent of Whites, 19.5 percent of Blacks, and 12.9 percent of American Indians took the courses designated as minimal. Both the rigor and the number of recommended courses taken by the African-American students place them at a
disadvantage. Academic unpreparedness obviously impacts academic achievement (Crosson, 1988; Tinto, 1997; Zea et al, 1997).

*The Role of Socioeconomic Status.* Socioeconomic status (SES) also affects academic achievement at college through the amount of financial stress students experience. In a time of decreased financial aid, particularly in the form of grants and scholarships, students from a lower social class often must work, which detracts from time they have to commit to academics. While African-American students are by no means homogeneous in terms of social class, they are disproportionately represented in the lower socioeconomic brackets. Hauptman and Smith (1994) note, for example, that “49 percent of the African-Americans in the 1982 class were low SES compared to 19 percent of the Whites” (p. 86-87). Consequently, these students come to college with less adequate preparation, and they find themselves having to work, in some instances, more than two jobs (Nora & Cabrera, 1996). Even with financial aid, African-American students often work more than 20 hours each week out of necessity (Stewart, Russell, & Wright, 1997). As one student lamented regarding the inadequacy of financial aid, “[they] need (enough) money so that [they] can spend more of [their] time studying rather than working two jobs just to stay [at college]” (Taylor & Olswang, 1997, Correlates to Positive Outcomes section, ¶ 2).

It is not simply the amount of financial aid, but also the form of aid (scholarship, grants, loans), that leads some minorities to work so many hours. Muñoz (1986) notes that finances are a major stressor for Hispanic students given their lower social class and the inability of parents to help financially to the same
extent that White parents can support their children. As a result, many Hispanic college students choose to work in order "to offset the magnitude of the loans they [would have] to take out in order to attend college." While research findings are not consistent regarding the impact of working upon academic performance, Stern and Nakata (1991) note that working more than 16 hours per week negatively affects a student's academic performance, particularly if that work is unrelated to one's field of study. In addition, research consistently shows that work increases both the likelihood of dropping out of college and the amount of time students take to graduate (Stern and Nakata, 1991).

In addition to the barriers posed by poorer academic preparation and the need to work more hours, students from a lower social class are often first generation college students. As such, they may well have missed the anticipatory socialization for higher education that college educated parents (and other college educated relatives and friends) are capable of giving (Weidman, 1989). In addition, they are less likely to be supported by people, who themselves, are college graduates.

D'Augelli and Hershberger (1993) found that African American students' social networks had significantly fewer people who were college or university graduates. Therefore, family and friends may be less capable of empathizing with the African-American student and may not be as well prepared to help that student negotiate the many challenges of a college education, not to mention the challenges posed by a predominately White campus.
The Role of Personality Factors. The role of personality factors—self-concept, coping skills, self-efficacy, locus of control, realistic self-appraisal, and goal orientation/career aspirations—in academic performance has also been examined. Students who have high self-esteem (conceptualized in a global manner or as academic self-efficacy) perform better academically and have higher persistence rates (Gloria, Robinson Kurpius, Hamilton, & Willson, 1999). Gloria et al found that educational self-efficacy was the most powerful predictor of persistence for their sample of Hispanic students. Researchers note the importance of students’ sense of competence as they negotiate education at a PWCU (Tracey & Sedlacek, 1987, Taylor & Olswang, 1997). Taylor & Olswang report that about 59 percent of the African-American students they surveyed cited confidence, along with cultural pride and determination, as crucial for success in PWCU. While a positive relationship exists between academic self-concept and academic achievement—students who do well have positive academic self-concepts—it is also clear that “Black students have lower academic self-concepts regardless of their achievement levels compared to other groups” (Heath, 1998, p. 37). Furthermore, evidence suggests that a positive self-concept can be undermined by an unfavorable campus environment (Smedley et al. 1993; Hackett & Byars, 1996; Stangor, Carr & Kiang, 1998).

Study habits are also related to academic achievement. The high school curriculum in which a student was enrolled and study habits developed as a result of the rigor (or lack thereof) influence academic ability which Cabrera, Nora & Terenzini (1999) found to have a significant impact on college academic
performance. For example, students whose curriculum required them to develop good study habits and elaborative learning strategies (methods to organize information and connect that information with an existing knowledge base) experience greater academic success in college (Cheung & Kwok, 1998; McNair, 1996). In addition, an internal locus of control, realistic self-appraisal and the ability to cope with racism and discrimination are positively associated with academic achievement of African-American students at PWCU's (Tracey & Sedlacek, 1984).

In summary, previous research suggests that African-American students' performance at PWCU's is a function of the strengths or deficits they bring to the institution. As such, the research emphasizes the role of quality of academic preparation (reflected in the high school curriculum pursued as well as college entrance scores), the student's background, and personality factors. The student-centered explanation suggests that the failure to pursue (or the inability of the student's school to provide) a highly rigorous academic curriculum leaves African-American students ill-equipped in terms of subject content as well as study skills to do well at PWCU's. In addition, due to their socioeconomic status, they have not been provided with the socialization experiences that would adequately prepare them for college: in many instances, they are first-generation college students and consequently, have neither the role models nor support from parents and relatives needed to succeed at college in general, and at a PWCU in particular. They are not simply hampered by the pressures (and lack of support) of being a first generation college student; they also must contend with the cultural differences and financial
pressures associated with attending a PWCU. Such students often lack the self-esteem and sense of competence needed to succeed at a PWCU. Consequently, many do poorly or fail to persist until graduation. While the more advantaged African-American student has a greater likelihood of success at a PWCU, even for these students, success at a PWCU is sometimes not within their reach. Therefore, it is important to consider the institution-centered explanation.

Institution-Centered Explanation: "What's Wrong With the Institution?"

In contrast to earlier studies, more recent studies suggest that the environment in which students learn must be addressed. This signals a shift in emphasis from looking at deficits of minority students that might undermine their success to looking at features of the campus environment that inhibit minority students' success.

Studies suggest that factors other than academic preparedness account for minority students' low academic performance at PWCU's (Loo & Rolison, 1986; Feagin, 1992; Hurtado, 1992, 1994; Steele and Aronson, 1995; Brown, 1998; Fleming and Morning, 1998; Hurtado et al, 1998; Hurtado et al, 1999). Fleming and Morning, in studying African-American engineering students, note that SAT scores do not explain much of the variance in student grades at PWCU's. Whereas SAT scores explained 12 percent of the variance for White students, it explained only 9 percent for African-American students and 5 percent for Hispanic students. On the other hand, SAT scores explained 21 percent of the variance in grade point average for African-American students at HBCU's. This raises the possibility that something about the PWCU's, not just the students' academic preparedness, contributes to
minority students' academic achievement. Gloria et al (1999) reiterate this view in their contention that the "environment, particularly when perceived as discriminatory, hostile, alienating, or isolating...can impede African American performance" (p. 258). Students at HBCUs do not encounter such environments; instead, they "learn in an environment in which race does not function as a stigma in their performance" (Smith, 1989, p. 53).

Research conducted by Steele & Aronson (1995), Brown (1998), and Stangor et al (1998) demonstrated the negative effects of stigmatizing environments. Steele and Aronson provided evidence that African-Americans' lower performance is not simply a function of academic underpreparedness or social class. More importantly, their research indicated that "stereotype threat"—"the threat of being viewed through the lens of a negative stereotype, or the fear of doing something that would inadvertently confirm that stereotype" (Steele, 1999, p. 46)—is situational, external to the individual. When SAT scores (a measure of preparedness) were held constant, African American students performed poorly relative to Whites on tests they thought measured verbal ability. By contrast, African-American students who did not think the same test measured verbal ability, performed just as well as White students. The impact of "stereotype threat" has been replicated for females' performance on math tests (Steele, 1997) and lower class college students' performance on tests of verbal ability (Croziet & Claire, 1998). Steele and Aronson suggest that fear of confirming stereotypes places undue performance pressure on African-American students, thereby decreasing the attentional resources available for focusing on the task at hand.
Aronson and his colleagues have challenged the idea that underperformance on the part of bright African-American students results from a lack of either self-confidence or motivation to do well. Their studies show that bright, confident, highly motivated young people underperform as a result of stereotype threat. Furthermore, Stangor et al (1998) demonstrated that stereotype threat diminishes the contribution that a high sense of competence might make to the quality of African-American students' academic performance. Specifically, Stangor et al found that women expected to perform more poorly on a spatial abilities task under conditions designed to heighten "stereotype threat" (i.e., stereotypes were activated as an explanation for poor task performance) even when they were initially confident in their ability to perform well. These findings are consistent with Hackett and Byars' (1996) assertion that discrimination and feelings of alienation can lower one's self-efficacy.

Steele (1999) asserted that in order for bright African-American students to be successful at PWCUs, they must know that their instructors have rigorous standards (and, therefore, are not dealing with them in terms of stereotypes) and that the instructors perceive them as capable of meeting those standards. This is consistent with the view that successful retention programs do not sacrifice excellence: they maintain their standards but at the same time, communicate to the African-American students a belief in their potential to meet those standards and a willingness to support them in their efforts to do so (Smith, 1999, Steele, 1999). Unfortunately, this is not the perception of many African-American students who attend PWCUs (Smith, 1997).
Instead, they “often feel that White faculty, staff, and students regard them as being less prepared, less deserving, affirmative-action quotas” (Powell, 1998, p. 110). This has serious ramifications for faculty-student interaction on PWCU.

Many studies indicate that both the frequency and quality of student-faculty interaction influence students' academic performance (Pascarella & Terenzini, 1991; Woodside, Wong, & Wiest, 1999). Both intellectual growth and college GPA are positively associated with student-faculty interaction (Tinto, 1997). While interaction with faculty is unquestionably an important factor in academic performance, Brown's (1998) findings suggest that interacting always and only with White faculty members may actually impede, rather than facilitate, an African-American student's academic performance by creating negative self-consciousness.

Building upon Goffman's contextual view of stigma, Brown (1998) examined the impact of a predominately White educational context on African-American and Hispanics' possible selves (i.e., "views of what people expect to be, what they hope to be, and what they fear becoming", p. 165). She reasoned that stereotypes regarding lack of intelligence and the prospect of being evaluated by White teaching assistants (TAs) or professors might adversely influence minority students' expectations for sustained interaction with White TAs or professors. By contrast, interactions with a TA or professor of the same race/ethnicity might be affirming rather than stigmatizing. In the latter case, the student has someone with whom he or she can identify, someone who presumably understands what the student is experiencing.
Brown asked African-American, White, and Hispanic students to imagine interacting with a TA of the same or different ethnicity either once or many times over the course of a semester. Brown found that when minorities anticipated semester-long interaction with a White TA, they had a more negative set of possible selves than did White students. Minorities also thought that TAs of the same ethnicity would evaluate them more positively than would White TAs. In addition, minorities anticipated that TAs who were ethnically matched were less likely to grade them unfairly when they had sustained interactions (i.e., semester-long interaction) with them. Thus, while faculty-student interaction is generally important for student success (Nettles et al. 1986), Brown’s findings suggest that the faculty-student interaction that occurs on PWCUs might actually decrease minority students’ academic self-efficacy insofar as faculty and TAs are White.

Limited interaction with African-American faculty and administrators is only one aspect of an “at risk” campus environment for African-American students. Research suggests that a number of other institutional characteristics contribute to an “at risk campus environment.” These include a small number of African-American students (Person & Christensen, 1996; Roach, 1992; Steele, 1992), racial incidents (Feagin, 1992; Gloria et al, 1999; Hurtado, 1992; Sedlacek, 1987; Zea et al, 1997), the absence of African-American organizations and cultural events (Loo & Rolison, 1986; Person & Christensen, 1996; Stewart, Russell & Wright, 1997), lack of a commitment to diversity (Hurtado, 1992; Smith, 1989, as cited in Hurtado, Milem &
Clayton-Pedersen, 1999) and the failure to provide opportunities for informal contact/mentoring with faculty and staff (Wyche & Frierson, 1990).

**Racial Composition of the Institution.** Allen (1992) examined the impact of educational background, educational aspirations, gender, socioeconomic status, relationships with White students and faculty, racial composition and unity among African-American students on their academic achievement, occupational aspirations, and social integration. Racial composition of the institution—structural diversity—was the best predictor of both social integration and occupational aspirations of African-American students. In addition, it was the second most important predictor of academic achievement. The presence of minority administrators, faculty, staff and students is important to minority students for a number of reasons:

1. Diversity throughout the institution in adequate proportions reflects a commitment to diversity (Hurtado et al, 1999) and reflects institutional support for minorities (Loo & Rolison, 1986).

2. Diverse administrators, faculty, and staff can serve as empathic role models and mentors for students (Loo & Rolison, 1986; Gloria & Rodriguez, 2000). Smith (1989) suggests that students are more likely to seek out minorities “whom they believe will understand them and the experiences that they are going through as students, greatly reducing their feelings of loneliness, alienation, and isolation as students of color” (p. 57).
3. A small number of minorities can increase their social stigma (Steele, 1992) and lead to minority status stress (Brown, 1998; Prillerman, Myers & Smedley, 1989; Smedley et al, 1993).

4. A few African-American students—Kanter (1977) suggests less than fifteen percent—leads to certain perceptual tendencies (visibility, contrast, and assimilation) that in turn, create performance pressures (or stressors) for African-American students.

5. Increases in the number of African-American students increase their comfort levels. Loo & Rolison (1986) note that 80 percent of African American and Hispanic respondents stated that they would be more comfortable if minority representation on their campus increased. By contrast, 36% of the White respondents said they’d feel *less* comfortable, and 60% of Whites would feel “no different” if minority representation on their campus increased.

6. Increases in the number of African-American students at a PWCU is directly related to their degree aspirations (Carter, 1997).

Studies show, however, that a racially diverse population is lacking on PWCU campuses. For example, African American students typically make up less than 4 percent of the student population (Bennett, 1998). Hispanic students comprise 4 percent and Native Americans, less than 1 percent.

This disproportionately low representation of minorities also occurs among faculty and administrators. Hispanic faculty, for example, amounted to only 3.3
percent of the total college faculty in 1998 (Snyder et al, 1999). In addition, only 2.5 percent of college and university administrators are Hispanics (O’Brien, 1993). When 73 of the 94 Hispanic administrators are at HSIs (O’Brien, 1993), opportunities for Hispanic students at PWCUs to interact with Hispanic faculty and administrators are rather limited. In 1998, African-Americans comprised 5.1% of the total college faculty (Snyder et al, 1999). Schaefer (1996) notes that minority faculty members are typically part-time and low-ranking faculty (e.g., lecturer/instructor rank): only 8.5% were associate or full professors (Snyder et, 1999). By contrast, more minorities are present in service positions (e.g., food service, janitorial services). Therefore, the current racial composition of faculty and staff at PWCUs is problematic because:

1. Few minority faculty and administrators are available for interaction with, and as a source of support for, minority students. Part-time faculty may not be as accessible to minority students.

2. The "peripheral status" of faculty and staff decrease their ability to "encourage [minority] students to embark on their own extraordinary careers" (Aguirre & Martinez, 1994, p. 2); and

3. Viewing persons like themselves in primarily marginal positions contributes to minority students' stress and sense of not belonging (Smedley, et al, 1993; Bennett, 1998).

*Exposure to Minority Perspectives.* Simply increasing minority representation at all levels of the institution is not sufficient to provide a favorable campus environment for minorities. Studies suggest it is also important that colleges
incorporate multicultural perspectives into the curriculum (D'Augelli & Hershberger, 1993; Cabrera et al, 1999). Certain caveats have been mentioned. First, multicultural perspectives should not be relegated to ethnic studies courses directed toward racial/ethnic minorities (McNairy, 1996). Instead, multicultural perspectives should be integrated throughout the total curriculum. Failure to do so deligitimizes the experiences and views of minorities. Second, curricular content about minorities must not be limited to the "pathology of minorities...such issues as crime, poverty, fringe groups, and family disorganization" (Schaefer, 1996). This narrow focus stigmatizes the minority group and increases the likelihood of discomfort, a sense of isolation and loneliness among minority students. Therefore, multicultural perspectives must be presented to the entire campus community in a way that affirms minorities.

Cultural awareness workshops and diversity training are also crucial for providing a campus environment that is favorable for minorities. Such programs seek to promote harmony by providing information about diversity issues and encouraging participants to increase their awareness of their personal stereotypes and prejudices (Tan, Morris, & Romero, 1996). Tan et al (1996) conducted 40 diversity workshops and noted significant changes in participants' knowledge of diversity issues and of the adverse effects of prejudice and stereotypes in the workplace. In addition, participants expressed a better understanding of their own behavior (e.g., why they resorted to stereotypes and "how their attitudes had contributed toward a propensity to discriminate against, judge or isolate others.") (Tan et al, 1996). As in the workplace, university diversity programs provide an opportunity for the entire campus
community (Whites and minority populations alike), to learn about cultural
differences, the need to value diversity, and the obstacles to developing a truly
inclusive campus community.

Traditionally, minorities have been expected to adapt to the dominant culture
while Whites have not been expected to learn, or value, minority cultures. The
resulting ignorance of the minority experience contributes to the continued
devaluation of minority culture (McNairy, 1996). In contrast, when Whites participate
in diversity or multicultural workshops, Whites are more willing to increase their
understanding of minorities and engage in cross-racial interaction, which has the
potential for increasing the minority students' comfort level (Hurtado et al, 1999). In
the absence of diversity programs, then, minority students may experience a lower
quality of life: they feel devalued, less welcome and, at most, tolerated, at a PWCU.
As a result, they will be socially disengaged and consequently, less likely to achieve
academically or persist until graduation.

*Location/Setting.* The setting of the university has also been identified as
a potential impediment to both the comfort level and academic success of minority
students. In this regard, both the nature of the setting (urban, suburban, rural) and the
size of the community are important. Only 55 percent of African-American students
at a suburban university indicated that they are usually or always comfortable in the
town in which their college is located (Person and Christensen, 1996). A considerably
higher percentage reported they are usually or always comfortable in Black student
unions (82%) or with other African-American students (93%). Therefore, while
African-American students at PWCU students may be comfortable in Black student unions or with others of the same race, they experience relative discomfort in the community in which their institution is located.

Tuch (1987) notes a relationship between size of the community and racial tolerance: larger communities tend to be more tolerant of racial minorities. In addition, urban settings more likely assure minority students access to persons and community organizations with which they can identify (e.g., retail establishments that carry ethnic products, churches, social activities). If, as Parker (1998) suggests, colleges that are located outside of minority concentrations are barriers to academic success, the campus setting of many PWCU's is problematic for minority students.

Incidences of Racism. A number of studies have demonstrated the negative impact of prejudice and discrimination on minority students' comfort level, academic performance, satisfaction, and persistence at a PWCU (Allen, 1988a; Feagin, 1992; Hurtado, 1992; Sedlacek, 1987). Feagin (1992) notes that racist incidents include verbal aggression (e.g., racist graffiti and racist jokes), physical aggression, exclusion, cultural dismissal (e.g., little or no support for research regarding racial issues, invalidating ethnic dress or cultural patterns) and type-casting (i.e., the assumption that all Blacks are alike). In one study, minority students ranked racial bias, discrimination and prejudice as the most serious problems they had faced at a PWCU (Livingston & Stewart, 1987). Powell (1998) found that many minority students "experience open hostility, racism, discrimination and isolation" (p. 110). In addition,
they feel Whites view their presence as evidence of a lowering of standards and hence, a threat to the quality of PWCUs (Hurtado, 1994; Powell, 1998).

Given their negative experiences, minority students feel unwelcome or, at best, tolerated by Whites. If minorities seek out the comfort and security of other ethnic or racial minority students, Whites often define their behavior as separatism or self-segregation (McClelland & Auster, 1990; Person & Christensen, 1996; Powell, 1998). Minorities report higher levels of stress and greater personal dissatisfaction with the university (Allen, 1988a). Thus, in addition to the normal stress that accompanies the college experience, minorities often experience the unique stress posed by racism on campus, unique because racism intensifies both the sense of not belonging and the adverse consequences of other stressors the student experiences (Nora & Cabrera, 1996). The cumulative effect of these racist incidents may be poorer academic performance (Feagin, Vera & Imani, 1996; Hurtado, 1992; Smedley, 1987), lower levels of social integration (Gloria et al, 1999), and higher rates of attrition (Allen, 1988a; Fleming, 1984, Smedley et al, 1993).

Extent to Which the Environment is Supportive of Minorities. Institutional support of minorities includes the presence of minority organizations, opportunities for informal faculty-student interaction, possibilities for mentoring, academic support, and culturally relevant social and intellectual activities. Research clearly establishes the importance of minority organizations for social support for African-American students at PWCUs (Loo & Rolison, 1986; McClelland, 2001; Orbe & Harrison, 2001). Person & Christensen (1996) suggest that many African American students
participate in these organizations because of the support and confidence they provide students “who are otherwise made to feel different and alone” (p. 3). These organizations, then, provide a source of acceptance, support, and confidence, which, in turn, leads to higher levels of satisfaction with their experiences. In the absence of such organizations and activities, African-American students are left to develop their own social networks, and Person and Christensen's (1996) findings suggest that doing so depletes energy reserves that could be devoted to academic pursuits.

The availability of faculty and staff to serve as mentors for minority students is an important aspect of minority support for coping with the campus environment, academic performance and persistence to graduation. Gloria et al. (1999) and Gloria & Rodriguez (2000) suggest that mentoring relationships can increase the comfort levels of minorities on PWCU and add that according to Fleming (1984), when such support is present, African American students perceive the campus environment in a more positive way. Grandy (1998) adds that the presence of minority role models and mentors and the presence of a committed minority relations staff provide the support needed to “counterbalance prejudice,...provide direction in academic identity formation, and...to resolve personal and academic problems” (p.10). In the absence of such support—by minorities or ethnically sensitive Whites—African-American students' academic integration, social integration, academic performance, and persistence rates may suffer.

While minority support is crucial, Hurtado (1992) notes the importance of student-centeredness. That is, the extent to which an institution is supportive of all of
its students, not just minority students, is related to perceptions of racial climate. On student-centered campuses, the faculty are available to students outside of class and normal office hours; in addition, faculty are involved in students' academic and personal lives. Faculty involvement, coupled with an institutional priority on meeting all students' needs through student services and nonrepayable financial aid, impart a sense of fairness: the students believe that they all are valued equally, that no group is given special privileges. As a result, they are less likely to perceive racial tension on campus. By contrast, when students sense a greater institutional priority for reputation (e.g., national image, prestige) than for students' welfare, they perceive higher levels of racial tension.
Study 1

The research described above has shown that institutional characteristics are related to the quality of life and academic performance of minority students at PWCUs. This research thus makes a significant contribution to our understanding of why non-Asian minorities find themselves at a relative disadvantage to Whites at PWCUs. Nevertheless, an important limitation of this previous research is that it has not examined the institutional characteristics that minority students, themselves, are likely to consider when assessing the quality of the campus environment. Therefore, in Study 1, I developed a questionnaire, The Campus Climate Survey, designed to identify the institutional characteristics of PWCUs that African-American students, themselves, perceive as important predictors of the quality of the campus environment.

Method

Participants. An availability sample was used to solicit participation from college students at Western Michigan University and college-bound seniors in two public high schools. College students completed the Campus Climate Survey in their classes or student organizations. High school seniors completed it in one of their classes. Of the 463 surveys administered, I analyzed only those completed by African Americans and Whites (n = 375). The high school sample included 67 African-
Americans and 66 Whites. Sixty-one of the 242 college students were African-Americans.

The Campus Climate Survey. The Campus Climate Survey was designed to address the question, "What institutional characteristics of a predominately White campus suggest that African-American students would fit in and feel welcome?" The Campus Climate Survey consists of 22 characteristics on which colleges and universities may differ (See Appendix A). On the basis of previous research, some of these characteristics were expected to be directly related to African-American students' perceptions of the favorableness of the campus environment—students' perception of racial climate as well as whether opportunities exist for developing close relationships with faculty, peers, and staff—for African-American students (e.g., minority representation and multicultural exposure). Other characteristics were expected to contribute to the perceptions of overall quality of the institution (e.g., academic strength, quality of campus facilities, and co-curricular activities).

Participants were asked to indicate the extent to which they would consider each characteristic for determining how socially comfortable they would be on a predominately White campus using a scale ranging from 1 (definitely would not consider) to 7 (definitely would consider). Social Comfort was defined for participants as fitting in and feeling welcome. Participants were also asked to list (and rate using the same scale) additional institutional characteristics they would use to determine whether they would feel comfortable.
Procedure. All participants completed the Campus Climate Survey anonymously. Western Michigan University students were asked to read and sign the informed consent forms if they were willing to participate (See Appendix B). If they chose not to do so, they could return the blank survey. They were asked not to complete the survey if they had done so previously. Those under eighteen years of age were also instructed to return the blank survey. Western Michigan University students completed the survey in their classrooms or student organization meetings. Parents of high school seniors received passive consent letters (See Appendix C). Students whose parents permitted them to participate were given a survey to complete. They were asked to read and sign the assent form if they were willing to participate (See Appendix B). If they chose not to participate, they could return the blank survey. High school seniors completed the survey in their classrooms. Responses of only African-American and White students were used in the analysis.

Results

1 calculated separate means for both African-American and White high school seniors and college students for each of the 22 institutional characteristics. Results indicate that for each group—African-American and White—the ratings of high school and college students are very similar (See Table 1). Indeed, there were no significant differences between high school and college students on any of the 22 institutional characteristics. Therefore, all analyses were collapsed across high school and college students.
Table 1

Mean Ratings for Institutional Characteristics by Race and Year in School

<table>
<thead>
<tr>
<th>Institutional Characteristic</th>
<th>African-American</th>
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<th>White</th>
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<tr>
<td></td>
<td>High School</td>
<td>College</td>
<td>High School</td>
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<td></td>
<td>Senior</td>
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<td>Senior</td>
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<tr>
<td>Financial Aid Targets for Minorities</td>
<td>4.18 1.91</td>
<td>4.37 1.78</td>
<td>2.17 1.53</td>
<td>2.93 1.75</td>
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<tr>
<td>Attractiveness of Campus</td>
<td>4.33 2.02</td>
<td>4.53 1.75</td>
<td>5.03 1.45</td>
<td>4.99 1.47</td>
</tr>
<tr>
<td>Racial Composition of Students</td>
<td>5.16 1.68</td>
<td>5.02 1.84</td>
<td>3.35 1.68</td>
<td>4.02 1.67</td>
</tr>
<tr>
<td>Extra-Curricular Programming</td>
<td>4.18 1.80</td>
<td>4.41 1.64</td>
<td>4.23 1.66</td>
<td>4.49 1.47</td>
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<tr>
<td>Availability of Ethnic Organizations</td>
<td>5.09 1.55</td>
<td>5.39 1.56</td>
<td>2.33 1.33</td>
<td>3.06 1.69</td>
</tr>
<tr>
<td>Quality of Food Service</td>
<td>4.69 2.10</td>
<td>3.97 1.80</td>
<td>4.11 1.78</td>
<td>4.21 1.78</td>
</tr>
<tr>
<td>Institutional Characteristic</td>
<td>African-American</td>
<td>White</td>
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<tr>
<td></td>
<td>High School Senior</td>
<td>College</td>
<td>High School Senior</td>
<td>College</td>
</tr>
<tr>
<td>Quality of Facilities</td>
<td>5.60 1.84</td>
<td>5.07 1.71</td>
<td>5.26 1.29</td>
<td>5.41 1.41</td>
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<tr>
<td>Racial Composition of Staff</td>
<td>5.29 1.77</td>
<td>4.98 1.69</td>
<td>2.64 1.54</td>
<td>3.44 1.74</td>
</tr>
<tr>
<td>Size of Library</td>
<td>3.87 2.00</td>
<td>3.87 1.78</td>
<td>3.31 1.70</td>
<td>3.33 1.58</td>
</tr>
<tr>
<td>Distance from Home</td>
<td>3.99 2.08</td>
<td>4.90 1.81</td>
<td>4.59 1.71</td>
<td>4.87 1.60</td>
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<tr>
<td>Location (rural, suburban, urban)</td>
<td>5.04 1.58</td>
<td>4.97 1.65</td>
<td>4.76 1.64</td>
<td>5.24 1.22</td>
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<tr>
<td>Efforts to Recruit Minorities</td>
<td>5.14 1.45</td>
<td>5.23 1.59</td>
<td>2.58 1.53</td>
<td>3.39 1.63</td>
</tr>
<tr>
<td>Prestige of University</td>
<td>4.40 1.56</td>
<td>4.89 1.37</td>
<td>4.16 1.56</td>
<td>4.66 1.38</td>
</tr>
<tr>
<td>Racial Composition of Faculty</td>
<td>5.03 1.65</td>
<td>4.92 1.52</td>
<td>2.54 1.39</td>
<td>3.30 1.59</td>
</tr>
<tr>
<td>Institutional Characteristic</td>
<td>African-American High School Senior</td>
<td>African-American College</td>
<td>White High School Senior</td>
<td>White College</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-------------------------------------</td>
<td>--------------------------</td>
<td>--------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Reputation of Faculty</td>
<td>4.93 1.76</td>
<td>5.13 1.58</td>
<td>4.49 1.55</td>
<td>4.96 1.40</td>
</tr>
<tr>
<td>Availability of Ethnic Studies Courses</td>
<td>5.09 1.35</td>
<td>5.23 1.40</td>
<td>2.68 1.40</td>
<td>3.10 1.68</td>
</tr>
<tr>
<td>Racial Composition of President's Cabinet</td>
<td>4.57 1.67</td>
<td>4.30 1.71</td>
<td>2.10 1.30</td>
<td>2.66 1.58</td>
</tr>
<tr>
<td>Strength of Academic Programs in Area of Interest</td>
<td>5.50 1.73</td>
<td>5.59 1.61</td>
<td>5.69 1.68</td>
<td>5.82 1.33</td>
</tr>
<tr>
<td>Total Cost of Attending</td>
<td>5.76 1.73</td>
<td>5.16 2.04</td>
<td>4.85 2.08</td>
<td>5.32 1.68</td>
</tr>
<tr>
<td>Contact with Minority Faculty</td>
<td>4.87 1.65</td>
<td>5.03 1.64</td>
<td>2.67 1.58</td>
<td>3.13 1.70</td>
</tr>
<tr>
<td>Internet Access</td>
<td>5.04 1.83</td>
<td>4.57 1.96</td>
<td>4.31 1.90</td>
<td>5.15 1.65</td>
</tr>
<tr>
<td>Quality of Athletic Programs</td>
<td>4.78 1.88</td>
<td>4.08 1.75</td>
<td>3.73 1.95</td>
<td>3.95 1.71</td>
</tr>
</tbody>
</table>
I conducted a factor analysis on the survey items to determine if there are certain clusters of characteristics that represent common underlying dimensions of the perceived quality of the campus environment. I conducted a factor analyses for the total sample as well as for African-Americans and Whites separately. Two factors emerged for the total group: campus environment characteristics and general institutional characteristics. These two factors explained 49.11 percent of the total variance. The campus environment factor (eigenvalue = 6.77), which accounts for 31.86 percent of the variance (9 items, Cronbach's Alpha = .93), consists of institutional characteristics that suggest something about the campus environment (e.g., institutional efforts to recruit minorities, racial composition of the faculty, availability of ethnic organizations), and hence, enables students to anticipate their social comfort level (See Table 2). The general institutional characteristics factor measures institutional quality (e.g., attractiveness of campus, quality of food service, academic prestige). It consists of 13 items and has a Cronbach's Alpha of .86 and an eigenvalue of 3.75 (See Table 3).

The factor analysis for the African-American subsample yielded two factors, campus environment (9 items, Cronbach's Alpha = .86) and general institutional characteristics (11 items, Cronbach's Alpha = .82). These two factors explained 41.73 percent of the total variance. The campus environment factor (eigenvalue = 6.72) accounts for 30.56 percent of the variance, and the general institutional characteristics factor (eigenvalue = 2.46) accounts for 11.17 percent of the variance. In contrast to the campus environment factor for the total group, the racial composition of the
<table>
<thead>
<tr>
<th>Item</th>
<th>Total Sample</th>
<th>African-Americans</th>
<th>Whites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of Ethnic Organizations</td>
<td>.815</td>
<td>.714</td>
<td>.744</td>
</tr>
<tr>
<td>Availability of Ethnic Studies Courses</td>
<td>.791</td>
<td>.558</td>
<td>.694</td>
</tr>
<tr>
<td>Contact with Minority Faculty</td>
<td>.770</td>
<td>.637</td>
<td>.648</td>
</tr>
<tr>
<td>Location</td>
<td>---</td>
<td>.388</td>
<td>---</td>
</tr>
<tr>
<td>Efforts to Recruit Minorities</td>
<td>.844</td>
<td>.733</td>
<td>.789</td>
</tr>
<tr>
<td>Financial Aid Targeted for Minorities</td>
<td>.536</td>
<td>---</td>
<td>.517</td>
</tr>
<tr>
<td>Racial Composition of Faculty</td>
<td>.867</td>
<td>.826</td>
<td>.858</td>
</tr>
<tr>
<td>Racial Composition of President's Cabinet</td>
<td>.777</td>
<td>---</td>
<td>.796</td>
</tr>
<tr>
<td>Racial Composition of Students</td>
<td>.662</td>
<td>.736</td>
<td>.633</td>
</tr>
<tr>
<td>Racial Composition of Staff</td>
<td>.791</td>
<td>.704</td>
<td>.768</td>
</tr>
<tr>
<td>Total Cost of Attending</td>
<td>---</td>
<td>.415</td>
<td>---</td>
</tr>
<tr>
<td><em>Eigenvalue</em></td>
<td>6.77</td>
<td>6.72</td>
<td>6.65</td>
</tr>
<tr>
<td><em>Variance Explained</em></td>
<td>31.86</td>
<td>30.56</td>
<td>30.23</td>
</tr>
<tr>
<td><em>Cronbach's Alpha</em></td>
<td>.93</td>
<td>.86</td>
<td>.91</td>
</tr>
</tbody>
</table>
Table 3
Factor Loadings of General Institutional Characteristics Scale for Total Sample, African-Americans and Whites

<table>
<thead>
<tr>
<th>Item</th>
<th>Total Sample</th>
<th>African-Americans</th>
<th>Whites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attractiveness of Campus</td>
<td>.550</td>
<td>.503</td>
<td>.602</td>
</tr>
<tr>
<td>Distance from Home</td>
<td>.436</td>
<td>.319</td>
<td>.475</td>
</tr>
<tr>
<td>Extra-Curricular Programming</td>
<td>.490</td>
<td>.388</td>
<td>.508</td>
</tr>
<tr>
<td>Internet Access</td>
<td>.683</td>
<td>.652</td>
<td>.672</td>
</tr>
<tr>
<td>Location</td>
<td>.413</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Prestige of University</td>
<td>.622</td>
<td>.509</td>
<td>.642</td>
</tr>
<tr>
<td>Quality of Athletic Programs</td>
<td>.484</td>
<td>.395</td>
<td>.590</td>
</tr>
<tr>
<td>Quality of Facilities</td>
<td>.724</td>
<td>.673</td>
<td>.722</td>
</tr>
<tr>
<td>Quality of Food Service</td>
<td>.584</td>
<td>.463</td>
<td>.632</td>
</tr>
<tr>
<td>Reputation of Faculty</td>
<td>.521</td>
<td>.443</td>
<td>.570</td>
</tr>
<tr>
<td>Size of Library</td>
<td>.486</td>
<td>.617</td>
<td>.503</td>
</tr>
<tr>
<td>Strength of Academic Programs</td>
<td>.658</td>
<td>.571</td>
<td>.664</td>
</tr>
<tr>
<td>Total Cost of Attending</td>
<td>.511</td>
<td>---</td>
<td>.607</td>
</tr>
</tbody>
</table>

Eigenvalue                   | 3.75         | 2.46              | 3.99   |
Variance Explained           | 17.26        | 11.17             | 18.12  |
Cronbach's Alpha             | .86          | .82               | .87    

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President's Cabinet and financial aid targeted for minorities are not included in the
campus environment factor for African-Americans (See Tables 2 and 3). Possibly, the
President's Cabinet is far enough removed from the students' day-to-day interactions
that they do not feel it would impact their level of social comfort. While research
indicates that financial aid is needed by the typical African-American student (and the
lack of it could be a source of severe stress), financial aid that is specifically targeted
for minorities may make African-American students feel more different and hence,
less comfortable, on a PWCU campus. Consistent with previous research, location
and cost did load on the campus environment factor (Muñoz, 1986; Parker, 1998;
Stewart et al, 1997). Hence, these institutional characteristics may impact social
comfort through their impact on the everyday life of the student.

Two factors also emerged for the White subsample. The general institutional
characteristics factor (eigenvalue = 3.99) consisted of 12 items (Cronbach's Alpha =
.87) See Table 3. The campus environment factor (eigenvalue = 6.65) consisted of
nine items and had a Cronbach's Alpha of .91. The racial composition of the
President's Staff item was included on the campus environment scale for Whites (See
Table 2).

To test the importance of the campus environment characteristics for
determining the social comfort of African-American students, I averaged the
importance ratings for the items comprising the campus environment factor and the
items comprising the general institutional characteristics factor separately for
African-Americans and Whites. The campus environment factor included the 7 items

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that loaded on the scale for both African-Americans and Whites. The general institutional characteristics factor did not include distance from home but it included the total cost of attending. I then subjected the importance ratings to a 2 (Race of Participant: African-American, White) x 2 (Institutional Characteristics: campus environment, general) analysis of variance (ANOVA) with repeated measures on the institutional characteristic factor. The predicted race of participant x institutional characteristics interaction was significant, $F(1, 374) = 192.85, p < .001$. The means for this interaction effect are displayed in Table 4.

Table 4
Mean Scores for General Institutional Characteristics and Campus Environment Characteristics by Race

<table>
<thead>
<tr>
<th>Institutional Characteristics</th>
<th>Race of Participant</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>African American</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campus Environment</td>
<td>$M$</td>
<td>5.02</td>
<td>3.09</td>
</tr>
<tr>
<td></td>
<td>$SD$</td>
<td>1.13</td>
<td>1.28</td>
</tr>
<tr>
<td></td>
<td>$n$</td>
<td>131</td>
<td>247</td>
</tr>
<tr>
<td>General</td>
<td>$M$</td>
<td>4.74</td>
<td>4.72</td>
</tr>
<tr>
<td></td>
<td>$SD$</td>
<td>1.04</td>
<td>.98</td>
</tr>
<tr>
<td></td>
<td>$n$</td>
<td>131</td>
<td>247</td>
</tr>
</tbody>
</table>

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As indicated in Table 4, African-Americans rated the campus environment characteristics as more important for determining social comfort ($M = 5.02, SD = 1.13$) than did Whites ($M = 3.09, SD = 1.28$), $t(376) = 14.67, p < .001$. However, African-American and White participants did not differ in how important they rated the general institutional characteristics for determining social comfort ($M = 4.74, SD = 1.04$ and $M = 4.72, SD = .98$ respectively), $t(376) < 1$. Furthermore, African-Americans rated the campus environment characteristics as more important for determining social comfort ($M = 5.02, SD = 1.08$) than the general institutional characteristics ($M = 4.74, SD = 1.04$), $t(130) = 3.04, p < .01$. In contrast, White participants rated the general institutional characteristics ($M = 4.72, SD = .98$) as more important than the campus environment characteristics ($M = 3.09, SD = 1.28$), $t(246) = 18.72, p < .001$.

Taken together, these findings suggest that African-American participants were especially attuned to the campus environment characteristics to determine how comfortable they would feel at a PWCU. Those are the characteristics germane to particular concerns African-Americans have about attending a PWCU.

Discussion

This study is significant because it addresses institutional characteristics from the vantage point of the African-American student. Previous studies measured many of these characteristics and correlated them with student perceptions of the campus environment (Allen, 1988b, 1992; Hurtado, 1992; Zea et al, 1997; Gloria et al, 1999). This study differs from previous ones because it does not presume that certain
characteristics would be important for providing a favorable campus environment. Instead, it identified those characteristics that African-American students themselves deem important for assessing the campus environment of an institution. Furthermore, this study demonstrates that these characteristics are uniquely important for African-American students, that these characteristics matter to them but not to Whites.

The results indicate that African-American students attended to both general institutional characteristics and characteristics that are indicative of campus environment to ascertain the level of social comfort they would experience on a PWCU campus. However, those characteristics indicative of campus environment were more important. These characteristics suggest something to African-American students about the availability of persons with whom they can identify and activities that reflect their cultural interests as well as the institution's stance toward diversity, all factors that research suggests is related to their comfort level. These findings are consistent with other studies, suggesting that the structural diversity of the campus as well as academic and cultural programming impact the level of social comfort of minorities (in this case, African-Americans) experience (Allen, 1988b, 1992; Feagin, 1992; Loo & Rolison, 1986; Person & Christensen, 1996; Stewart et al, 1997). Furthermore, the present findings extend previous research by identifying those characteristics to which African-American students spontaneously attend when deciding how comfortable they would feel on a PWCU campus.

In addition, this study addressed the question of whether African-Americans and Whites attend to the same institutional characteristics when assessing social
comfort. General institutional characteristics are equally important to both groups. However, general institutional characteristics are more important for determining the social comfort of White students at PWCUs than the campus environment characteristics. Most studies consistently demonstrate that campus environment is a more important issue for minority students (Ancis, Sedgeck, & Mohr, 2000; Hurtado, 1992; Hurtado, 1994; Nettles et al, 1986; Zea et al, 1997).

**Directions For Future Research.** This study focused on African-American students at PWCUs. Given the increased number of White students at HBCUs, future studies should examine the relative importance of general institutional characteristics and campus environment characteristics for White students at HBCUs. Such would enable us to examine Whites students' perceptions of campus environments at HBCUs and their expectations given those perceptions. These studies may also help us understand the relative impact of tokenism (structural diversity) and other aspects of a negative campus environment on students' quality of life and academic outcomes (performance and persistence). Furthermore, these studies may yield information that PWCUs can use to create more favorable environments for African-Americans.

Future studies should also examine more closely the relationship between financial aid targeted toward minorities and its impact on those students' social comfort. Financial aid is often essential for attendance at PWCUs because many minority students are from the lower social classes. Institutional aid targeted for minority groups may communicate that institution's commitment to increasing minority enrollment and thus, suggest that it is a place where minorities would be
welcomed. However, in the present study, African-American students assigned the lowest ranking (4.23) to this item out of the nine items related to campus environment. In addition, this item was not included in the campus environment factor for them. It is quite possible that such financial aid poses a dilemma for the African-American student: the aid is essential to make attendance at a PWCU affordable; however, the designation (i.e., minority financial aid) is problematic. Research that explains how African-American students perceive financial aid targeted for minorities and the reasons for that perception can be quite helpful to administrators seeking to diversify their campuses.
Study 2

Study 2 was designed to test the hypothesis that African-American students’ perceptions of campus environment influence their expectations about quality of life and academic achievement. That is, for African-American students (but not for White students), the perceived quality of the campus environment should be related to expectations for quality of life and academic achievement at the university: an unfavorable campus environment will lead to expectations of a poorer quality of life and poorer academic achievement; a favorable campus environment will lead to expectations of a better quality of life and better academic achievement.

Participants read a profile of a fictitious university. I developed the profile using characteristics that a different group of African-American respondents identified in Study 1 as characteristics of PWCU's that would impact their quality of life on those campuses. The profiles described an unfavorable campus environment, favorable campus environment, and a neutral (control) campus environment for African-American students (See Table 5). The dependent measures included anticipated quality of life, academic integration, social integration, and academic performance. Based on previous research, I predicted a main effect of race—overall, African-Americans should expect to have a poorer quality of life, academic and social integration, and first semester and first year grade point averages than Whites. In addition, I predicted a race x campus environment interaction effect on each measure.
Table 5

Comparison of University Profiles

<table>
<thead>
<tr>
<th>Institutional Characteristic</th>
<th>Campus Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Favorable</td>
</tr>
<tr>
<td>Efforts to Recruit Minorities</td>
<td>-Diversity Initiatives</td>
</tr>
<tr>
<td></td>
<td>-Multicultural Campus</td>
</tr>
<tr>
<td>Availability of Ethnic Organizations</td>
<td>-4 African-American</td>
</tr>
<tr>
<td></td>
<td>-1 Latino</td>
</tr>
<tr>
<td></td>
<td>-1 Multicultural House</td>
</tr>
<tr>
<td></td>
<td>-1 International House</td>
</tr>
<tr>
<td>Racial Composition of Students</td>
<td>-14% African-Americans</td>
</tr>
<tr>
<td></td>
<td>-9% Latinos</td>
</tr>
<tr>
<td></td>
<td>-3% Asian-Americans</td>
</tr>
<tr>
<td></td>
<td>-70% Whites</td>
</tr>
<tr>
<td></td>
<td>-4% Internationals</td>
</tr>
<tr>
<td>Racial Composition of Faculty</td>
<td>-4% African-Americans</td>
</tr>
<tr>
<td></td>
<td>-1% Latinos</td>
</tr>
<tr>
<td></td>
<td>-5% Asian-Americans</td>
</tr>
<tr>
<td></td>
<td>-94.5% Whites</td>
</tr>
</tbody>
</table>
—the campus environment manipulation should uniquely affect African-American students. Specifically, because the institutional characteristics used to manipulate the favorableness of campus environment for African-American students uniquely affect them, they should expect a poorer quality of life, academic and social integration, and academic performance relative to White students in the unfavorable campus environment condition in comparison to the favorable campus environment condition.

Method

Participants and Design. White \( (n = 344) \) and African-American \( (n = 82) \) students at Western Michigan University participated in this study. Males made up 57.3 percent of the African Americans \( (n = 47) \) and 56.1 percent of the White participants \( (n = 193) \). Females comprised 42.7 percent of the African-Americans \( (n = 35) \), 43.9 percent of the White sample \( (n = 151) \). Participants, solicited through introductory-level classes and minority student organizations, were randomly assigned to one of three experimental conditions with university campus environment (unfavorable, neutral (uninformative), and favorable) serving as a between-subjects independent variable.

Procedure. Students were asked to participate in a study of how institutional perceptions affect students' anticipated quality of life. They were assured of anonymity, and they were asked to write the last four digits of their social security numbers on the front page for the purpose of identifying duplicate responses since the study was conducted in a number of settings. Participants were asked to read and sign
the informed consent forms if they were willing to participate. If they chose not to participate, they could return the blank survey.

The study was conducted with participants in their classrooms or student organization meetings. Participants read a description of a fictitious PWCU (Whitmore University) that had institutional characteristics that suggested either an unfavorable, neutral (uninformative), or favorable campus environment. Participants were instructed to imagine themselves as students at Whitmore University and indicate how they would experience life at the university. They were asked to complete a two-part survey. The first part, "Tell Us What you Think," consisted of seventeen items designed to assess expectations regarding quality of life, social integration, academic integration, academic performance, and overall attitude toward the university (See Appendix D). The second part, "Tell Us About Yourself," consisted of ten multiple choice and two open ended questions designed to gather basic demographic information as well as information regarding individual-difference variables known to influence academic performance and academic and social integration (See Appendix D). These variables were used in a path analysis to examine the impact of individual-difference characteristics and campus environment upon the dependent variables. The individual-difference variables included:

1. *Self-Reported ACT Score.* The self-reported ACT score provided information about prior academic ability.

2. *Self-Reported High School Grade Point Average.* Self-reported high school GPA was recorded to represent a measure of prior academic ability.
3 Sex of Participant. Sex of participant was recorded to test for possible differences in expected quality of life and academic performance outcomes.

4 Intercultural Anxiety (ICA). ICA is a measure of the degree of apprehension a student has about interacting with students from different racial groups. Indicators of intercultural anxiety included nature of cross-racial contacts (how positive/negative?) and preference for interaction with persons of same race vs. different racial/ethnic group, measured by racial composition of three best friends. Studies suggest that ICA negatively impacts encounters with members of the outgroup. Thus, any anxiety the African-American student brings with him/her to the predominately White campus should affect expected social integration.

5 Socioeconomic Status (SES). Educational attainment of parents with whom the participant lived was recorded as a measure of SES.

Manipulation of the Independent Variable. The favorableness of the campus environment was manipulated by using 4 institutional characteristics that African-American students in Study 1 indicated they would consider in determining whether they would be socially comfortable—fit in and feel welcome—on a predominately White campus. The characteristics included availability of ethnic organizations, efforts to recruit minorities, racial composition of the student body, and racial composition of the faculty. Realism dictated that I not use all of the campus environment characteristics. Having done so would have made the manipulation too
blatant, clearly suggesting the reason for the study and, as a result, inviting demand characteristics. Therefore, I used the 4 characteristics that loaded highest on the campus environment factor for African-Americans in Study 1. In addition, the items eliminated did not cluster with those selected (i.e., factor loadings were .637 and .558) or the item does not typically appear on a college web site (i.e., racial composition of the staff). See Table 2.

Using verbal descriptions and pictures, I created fictitious university profiles to manipulate campus environment. In the neutral condition, no pictures were used, and specific information regarding each of these campus environment characteristics was deleted from the verbal descriptions. The byline for the Unfavorable and Neutral (control) Campus Environments was the same—"Cultivating Minds for the 21st Century." The byline for the Favorable Campus Environment was "Cultivating Minds for a Diverse Society." Table 5 summarizes the manipulations. The profiles were presented as copies of university web pages (See Appendixes E-G).

**Dependent Measures.** The Expected "Quality of Life" measure assessed perceptions of cultural fit, belongingness, personal well-being, and comfort. The measure consisted of items from Gloria et al's (1999) Cultural Congruity Scale (CCS) and University Environment Scale (UES) developed to measure university comfort for Asian American, American Indians, and Hispanic students. The CCS is a measure of the extent to which minority students perceive a cultural fit with the campus environment. The UES consists of descriptions of the campus environment that influence students' comfort levels and students' affective responses to the campus environment.
environment. I modified some of the items to assess the extent to which the student feels valued and comfortable on the campus. Examples of items I included on the Quality of life measure are “I feel that I would have to change myself to fit in at this school” and “I would not feel valued as a student on this campus.” Participants indicated the extent to which they agreed with each statement on a scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Expected Social Integration—the extent to which a student expects to be involved in campus activities—has two dimensions, formal and informal. Formal social integration is participation in formal activities (campus organizations, university sponsored activities); informal integration consists of interpersonal relationships formed with other students at the university (Hurtado et al, 1999). This measure consists of items developed by Nora and Cabrera (1996) and McNairy (1996). Examples include “There would be activities on campus that reflect my interest” and “I would be involved in at least one student organization.” See items 3, 10, 11 and 14 of "Tell Us What You Think." in Appendix D.

Expected Academic Integration is the extent to which the students anticipate being involved in the intellectual life of the college. It includes formal integration (that which occurs in the classroom) and informal integration (activities outside of class). Items developed by Nettles et al (1988) and Loo and Rolison (1986) comprise this scale. Examples include “I would find it easy to develop close relationships with faculty members on this campus” (1 = strongly disagree, 7 = strongly agree) and “I
would feel free to ask questions in class" (1 = *strongly disagree*; 7 = *strongly agree*).

See items 6, 7, and 13 of "Tell Us What You Think" in Appendix D.

Participants reported anticipated GPA after one semester and at the end of freshman year as a measure of expected academic performance. The first year is a crucial time when persistence decisions are made. I used an objective measure of academic performance because objective measures detect differences better than subjective measures due to the shifting standards phenomenon (Biernat, Manis & Nelson, 1991). Specifically, the meaning of a subjective measure's anchors may differ depending upon the exemplar being evaluated because subjective scales mask stereotype effects. Biernat et al (1991) found, for example, "that a target who was thought to be average in height (4.0 on subjective scale) [was] rated taller on the objective scale if a male" (p. 488). By contrast, an objective measure has "units [that] maintain a constant meaning across contexts and types of targets" (Biernat, Crandall, Halpin, Kobrynowicz, & Young, 1998). Biernat et al (1991) argue, therefore, that when possible, objective standards should be used.

As a measure of expected overall attitude toward the university, participants responded to the statement, "I would not recommend Whitmore to my friends" (1 = *strongly disagree*; 7 = *strongly agree*).

Finally, participants were asked to write one sentence describing their reaction to the study. Three surveys (two from the favorable campus environment condition, one from the unfavorable campus environment condition) were not used because the responses suggested suspicion regarding the true purpose of the study.
Results

Preliminary analyses on each dependent measure revealed no significant effects of sex of participant. Therefore, all analyses were collapsed across sex of participant.

Expected Informal Social Integration. A factor analysis conducted on the quality of life items and the informal social integration items revealed a single factor structure. Therefore, the items were combined to form an aggregate measure of expected informal social integration (8 items, Cronbach's Alpha = .82).

A 3 (Campus Environment: unfavorable, neutral, favorable) x 2 (Race of Participant: African-American, White) analysis of covariance (ANCOVA) was performed on informal social integration with scores on the ICA scale serving as a covariate. Because anxiety regarding cross-racial contact contributes to informal social integration, ANCOVA was used to remove its effect on the dependent measure. As predicted, there was a significant main effect of race, $F(1,420) = 66.59$, $p < .001$, suggesting that African-American students expected lower levels of informal social integration ($M = 3.78$, $SD = 1.23$) than White students ($M = 4.80$, $SD = .98$). There was also a main effect of campus environment, $F(2,420) = 3.05$, $p = .05$. Participants expected greater informal social integration in the favorable campus environment ($M = 4.76$, $SD = 1.05$) than in the unfavorable campus environment ($M = 4.59$, $SD = 1.19$), or the neutral condition ($M = 4.51$, $SD = 1.07$).

Finally, these main effects were qualified by a significant campus environment x race of participant interaction effect, $F(2,420) = 5.33$, $p < .01$. As can
be seen in Table 6, the unfavorable campus environment was particularly troublesome for African-American students. Indeed, simple effects tests revealed that African-Americans expected significantly lower levels of social integration in the unfavorable campus environment condition \((M = 3.36, SD = 1.32)\) than in the favorable campus environment condition \((M = 4.06, SD = 1.34), t(79) = 2.13, p = .04\) or the neutral condition \((M = 3.99, SD = .92), t(19) = 2.00, p = .05\). Furthermore, African-American participants expected a lower level of informal social integration than

Table 6

Mean Expected Informal Social Integration by Campus Environment and Race

<table>
<thead>
<tr>
<th>Campus Environment</th>
<th>Unfavorable</th>
<th>Neutral</th>
<th>Favorable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>3.36\text{a}</td>
<td>3.99\text{b}</td>
<td>4.06\text{b}</td>
</tr>
<tr>
<td>(SD)</td>
<td>1.32</td>
<td>.92</td>
<td>1.34</td>
</tr>
<tr>
<td>(n)</td>
<td>29</td>
<td>29</td>
<td>24</td>
</tr>
<tr>
<td>White</td>
<td>4.90\text{c}</td>
<td>4.62\text{d}</td>
<td>4.91\text{c}</td>
</tr>
<tr>
<td>(SD)</td>
<td>.94</td>
<td>1.07</td>
<td>.91</td>
</tr>
<tr>
<td>(n)</td>
<td>115</td>
<td>123</td>
<td>113</td>
</tr>
</tbody>
</table>

Note: Higher scores indicate more favorable expectations. Adjacent means that do not share a common subscript differ at \(p < .05\). Furthermore, African-American participants expected a lower level of informal social integration than
Whites ($M = 4.90, \text{SD} = .94$) in the unfavorable campus environment condition, $t(142) = 7.24, p < .001$.

The unfavorable campus environment impacted quality of life (social integration) expectations for African-American (but not White) students: an unfavorable campus environment caused them to be more pessimistic about both the extent to which they would be embraced (feel welcome, valued, and accepted) and the ease with which they would develop close friendships with other students. This suggests that African-American participants in Study 2 were sensitive to those campus environment characteristics identified by African-American participants in Study 1 as important predictors of the extent to which they would feel socially comfortable at a PWCU. When presented with institutional characteristics that suggest an unfavorable campus environment, the African-American students had lower expectations for comfort, acceptance, and interpersonal relationships with other students at the university.

*Expected Formal Social Integration.* Two items were used to measure expected formal social integration. They were "There would be activities on campus that reflect my interest" and "I would be involved in at least one organization." Surprisingly, there was only a modest correlation between the two items ($r = .47$). Therefore, I did not average the two items to form an aggregate measure of formal social integration. Instead, I analyzed the two items in a 3 (Campus Environment) x 2 (Race of Participants) x 2 (Formal Social Integration items) Multivariate Analysis of Variance (MANOVA) with formal social integration items serving as a within-subject
factor. There was a marginally significant campus environment x race x item interaction effect, $F(2, 421) = 2.84, p = .06$, suggesting that race moderated the effect of campus environment differently for each item.

Further analysis revealed a significant main effect of race on responses to the item, "Campus activities reflect my interest," suggesting that African-American students had lower expectations that campus activities would reflect their interests ($M = 4.0, SD = 1.76$) than White students ($M = 4.64, SD = 1.62$), $F(1,426) = 8.65, p < .01$. There was also a significant main effect of campus environment, $F(2, 426) = 6.38, p < .01$. In general, participants expected campus activities to reflect their interests to a greater extent in the favorable campus environment condition ($M = 4.76, SD = 1.59$), followed by the neutral ($M = 4.46, SD = 1.69$), and the unfavorable campus environment conditions ($M = 4.35, SD = 1.70$).

Finally, these main effects were qualified by a significant campus environment x race of participant interaction effect, $F(2, 426) = 5.02, p < .01$. As predicted, African-American students expected a significantly lower fit between campus activities and their interests in the unfavorable condition ($M = 3.24, SD = 1.83$) relative to Whites ($M = 4.63, SD = 1.54$), $F(1, 426) = 15.17, p < .01$. Furthermore, African-American students had a higher expectation that campus activities would reflect their interests in the favorable campus environment condition ($M = 4.84, SD = 1.57$) than in both the unfavorable condition ($M = 3.24, SD = 1.83$), $t(79) = 3.56, p < .001$, and the neutral condition ($M = 4.0, SD = 1.51$), $t(79) = 2.02, p = .05$. (See Table 7).
Table 7

Mean Expected Campus Activities Reflect my Interest by
Campus Environment and Race

<table>
<thead>
<tr>
<th>Campus Environment</th>
<th>Unfavorable</th>
<th>Neutral</th>
<th>Favorable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>$M$ 3.24&lt;sub&gt;a&lt;/sub&gt;</td>
<td>4.00&lt;sub&gt;bc&lt;/sub&gt;</td>
<td>4.84&lt;sub&gt;h&lt;/sub&gt;</td>
</tr>
<tr>
<td>$SD$</td>
<td>1.83</td>
<td>1.51</td>
<td>1.57</td>
</tr>
<tr>
<td>$n$</td>
<td>29</td>
<td>29</td>
<td>24</td>
</tr>
<tr>
<td>White</td>
<td>$M$ 4.63&lt;sub&gt;c&lt;/sub&gt;</td>
<td>4.57&lt;sub&gt;c&lt;/sub&gt;</td>
<td>4.73&lt;sub&gt;bc&lt;/sub&gt;</td>
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<tr>
<td>$SD$</td>
<td>1.54</td>
<td>1.71</td>
<td>1.60</td>
</tr>
<tr>
<td>$n$</td>
<td>115</td>
<td>122</td>
<td>113</td>
</tr>
</tbody>
</table>

Note: Higher scores suggest more favorable expectations. Adjacent means that do not share a common subscript differ at $p < .05$.

In contrast, there were no differences across campus environment conditions on the item, "campus activities reflect my interest," among White participants. Therefore, African-American students (but not Whites) perceived the PWCU differently based upon the manipulations presented, and, given those perceptions, anticipated a greater fit between activities on campus and their own interests in the favorable campus environment condition than the unfavorable one.
There was neither a main effect nor a campus environment x race interaction effect on the item, "I would be involved in at least one campus organization." Mean comparisons yielded no significant differences in either the African-Americans or Whites' expected involvement in the unfavorable, neutral, and favorable campus environment conditions. By the same token, comparisons of the average expected involvement of African-American and White students in each campus environment condition revealed no significant differences.13

*Expected Informal Academic Integration.* One item was used to measure expected informal academic integration, "It would be difficult for me to develop close relationships with Whitmore faculty members." A 3 (Campus Environment) x 2 (Race of Participant) Analysis of Variance (ANOVA) revealed a significant main effect of race, \( F(1,425) = 17.95, p < .001 \). African-American students expected more distant relationships with faculty \( (M = 4.25, SD = 1.67) \) than White students \( (M = 5.04, SD = 1.47) \). In general, then, Whites expect to be more comfortable developing close relationships with faculty than African-Americans at the depicted PWCU's. There was not a significant main effect of campus environment condition, \( F(2, 425) = 2.38, p > .05 \).

The predicted campus environment x race interaction was not significant, \( F(2, 425) < 1 \). The means for each cell are presented in Table 8. Planned comparisons were performed to further test the effect of the campus environment manipulation on African-American students' perceptions of the degree to which they could develop
close relationships with faculty. However, planned comparisons also failed to reveal a significant influence of campus environment on African-Americans' perceptions.

Table 8
Mean Expected Informal Academic Integration by Campus Environment and Race

<table>
<thead>
<tr>
<th>Campus Environment</th>
<th>Unfavorable</th>
<th>Neutral</th>
<th>Favorable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>$M$</td>
<td>3.97&lt;sub&gt;a&lt;/sub&gt;</td>
<td>4.68&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>$SD$</td>
<td>1.55</td>
<td>1.56</td>
</tr>
<tr>
<td></td>
<td>$n$</td>
<td>29</td>
<td>28</td>
</tr>
<tr>
<td>White</td>
<td>$M$</td>
<td>4.97&lt;sub&gt;b&lt;/sub&gt;</td>
<td>5.16&lt;sub&gt;ah&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>$SD$</td>
<td>1.45</td>
<td>1.53</td>
</tr>
<tr>
<td></td>
<td>$n$</td>
<td>115</td>
<td>123</td>
</tr>
</tbody>
</table>

Note: Higher scores suggest more favorable expectations. Adjacent means that do not share a common subscript differ at $p < .05$.

Expected Formal Academic Integration. Expected formal academic integration was measured with two items, "I would feel free to ask questions in class" and "If I were doing poorly in class, I would go to my professor for help." There is a modest correlation between the two items ($r = .50$). Therefore, I did not average the
two items to form an overall measure of formal academic integration. Instead, I analyzed the responses on the two items in a 3 (Campus Environment) x 2 (Race of Participants) x 2 (Formal Academic Integration items) MANOVA with item serving as a within subject factor.

There was a significant race x campus environment x item interaction effect, $F(2,425) = 3.06, p = .05$, suggesting that the race moderated the effect of the campus environment manipulation differently for each item.

A 3 (Campus Environment) x 2 (Race of Participants) ANOVA revealed a significant main effect of race on responses to the item, "I would feel free to ask questions in class." African-American participants anticipated greater inhibitions about asking questions in class ($M = 4.51, SD = 1.82$) than Whites ($M = 5.26, SD = 1.32$), $F(1, 425) = 17.482, p < .001$. There was also a main effect of campus environment, $F(1, 425) = 3.13, p = .05$. The favorable campus environment condition was most conducive to the participants' expectations about feeling free to ask questions in class ($M = 5.38, SD = 1.4$), followed by the neutral condition ($M = 5.03, SD = 1.47$), and the unfavorable campus environment condition ($M = 4.95, SD = 1.48$). There was no condition x race interaction effect, $F(2, 425) = 1.93, p > .05$. The means for each cell are displayed in Table 9.

Planned comparisons were performed to examine the impact of the campus environment condition upon African-American participants' perceptions of the extent to which they would feel free to ask questions in class. However, planned comparisons revealed no significant influence of campus environment on African-
Americans' perceptions. Perceptions of an unfavorable campus environment do not decrease African-American students' willingness to ask questions in class.

Table 9
Mean Expected "Feel Free to Ask Questions" by Campus Environment and Race

<table>
<thead>
<tr>
<th>Campus Environment</th>
<th>Unfavorable</th>
<th>Neutral</th>
<th>Favorable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>$M$ 4.03_a</td>
<td>4.76_a</td>
<td>4.80_a</td>
</tr>
<tr>
<td></td>
<td>$SD$ 1.92</td>
<td>1.62</td>
<td>1.89</td>
</tr>
<tr>
<td></td>
<td>$n$ 29</td>
<td>29</td>
<td>24</td>
</tr>
<tr>
<td>White</td>
<td>$M$ 5.18_b</td>
<td>5.09_ab</td>
<td>5.50_ab</td>
</tr>
<tr>
<td></td>
<td>$SD$ 1.25</td>
<td>1.43</td>
<td>1.25</td>
</tr>
<tr>
<td></td>
<td>$n$ 114</td>
<td>122</td>
<td>113</td>
</tr>
</tbody>
</table>

Note: Higher scores suggest more favorable expectations. Adjacent means that do not share a common subscript differ at $p < .05$.

There were no main effects or interaction effects for the item, "If I were doing poorly in class, I would go to my professor for help."

*Expected Academic Performance: GPA.* Because first semester and first year GPA were highly correlated ($r = .86$), an aggregate measure of expected GPA was computed by averaging responses to those two items.
Given the significant correlations between high school GPA and overall GPA, I conducted a 3 (Campus Environment) x 2 (Race of Participant) ANCOVA on expected GPA with high school GPA as a covariate. There was a significant main effect of race. White participants expected a higher overall GPA ($M = 3.23$, $SD = .43$) than African-American participants ($M = 2.96$, $SD = .46$), $F(2, 411) = 14.37$, $p < .001$. There was not a significant main effect of campus environment condition.

As indicated in Table 10, African-Americans expected a lower GPA.

Table 10

<table>
<thead>
<tr>
<th>Race</th>
<th>Campus Environment</th>
<th>Unfavorable</th>
<th>Neutral</th>
<th>Favorable</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American</td>
<td>$M$</td>
<td>2.88&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.99&lt;sub&gt;a&lt;/sub&gt;</td>
<td>3.03&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>$SD$</td>
<td>.47</td>
<td>.43</td>
<td>.49</td>
</tr>
<tr>
<td></td>
<td>$n$</td>
<td>22</td>
<td>27</td>
<td>22</td>
</tr>
<tr>
<td>White</td>
<td>$M$</td>
<td>3.26&lt;sub&gt;b&lt;/sub&gt;</td>
<td>3.21&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>3.23&lt;sub&gt;ab&lt;/sub&gt;</td>
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<td></td>
<td>$n$</td>
<td>110</td>
<td>121</td>
<td>110</td>
</tr>
</tbody>
</table>

Note: Higher scores suggest more favorable expectations. Adjacent means that do not share a common subscript differ at $p < .05$. 

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than did Whites ($M = 3.26, SD = .40$) in the unfavorable campus environment condition $F(1, 417) = 11.0, p < .01$ (See Table 10). African-Americans did not expect significantly lower GPAs than Whites in the neutral or favorable campus environment conditions.

**Expected Overall Attitude Toward the Depicted University.** The statement, "I would not recommend Whitmore to my friends" was used to measure overall attitude toward the depicted university ($1 = strongly disagree; 7 = strongly agree$). Responses were reverse coded so that higher scores reflected more positive attitudes toward the university. A $3 \times 2$ ANOVA was performed on overall attitude toward the depicted university. There was a significant main effect of race. White participants anticipated a more positive attitude toward the university: they were more likely to recommend Whitmore to their friends ($M = 4.63, SD = 1.51$) than African-American participants ($M = 3.82, SD = 1.92$), $F(1, 425) = 16.59, p < .001$. There was a marginally significant effect of campus environment condition, $F(1, 425) = 2.83, p = .06$: as a whole, participants were least likely to recommend the university with the unfavorable campus environment condition ($M = 4.29, SD = 1.75$), followed by the favorable campus environment ($M = 4.54, SD = 1.54$) and neutral conditions ($M = 4.59, SD = 1.58$). There was no campus environment condition x race interaction effect.

Planned comparisons were conducted even though there was not a significant condition x race interaction effect. In the unfavorable campus environment, African-American participants had significantly poorer attitudes ($M = 3.28, SD = 2.14$) than
White participants ($M = 4.55, SD = 1.55$), $F(1, 425) = 14.75, p < .01$ (See Table 11).

However, there were no significant differences between African-Americans and Whites' attitudes in the neutral or favorable campus environment conditions.

### Table 11

Mean Expected Overall Attitude Toward the Depicted University by Campus Environment and Race

<table>
<thead>
<tr>
<th>Campus Environment</th>
<th>Unfavorable</th>
<th>Neutral</th>
<th>Favorable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>$M$</td>
<td>3.28$_a$</td>
<td>4.21$_a$</td>
</tr>
<tr>
<td></td>
<td>$SD$</td>
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</tr>
<tr>
<td></td>
<td>$n$</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>White</td>
<td>$M$</td>
<td>4.55$_b$</td>
<td>4.68$_{ab}$</td>
</tr>
<tr>
<td></td>
<td>$SD$</td>
<td>1.55</td>
<td>1.58</td>
</tr>
<tr>
<td></td>
<td>$n$</td>
<td>115</td>
<td>122</td>
</tr>
</tbody>
</table>

Note: Higher scores suggest more favorable expectations. Adjacent means that do not share a common subscript differ at $p < .05$.

In summary, the present research indicates that institutional characteristics can have an adverse effect on the quality of life African-American students expect to experience at a PWCU. Information about the structural diversity (racial composition)
of the university, availability of ethnic organizations, and the institution's attitudes about diversifying the campus affected the African-American participants' expectations. When presented with an unfavorable campus environment, African-Americans thought they would be less likely to recommend Whitmore, would earn lower overall GPAs, would experience lower informal social integration, and would not develop as close relationships with faculty as Whites. In addition, they did not expect campus activities to reflect their interests. These findings highlight the important role that these institutional characteristics play in shaping the expectations of African-American students. More important, they reveal the negative impact that an unfavorable campus environment at a PWCU has on African-American students.

Path Analysis of Expected Social Integration and Academic Outcomes as a Function of Individual-Difference and Institutional Variables

As noted above, researchers have traditionally asserted that the African-American students' poorer academic performance is a function of individual deficits they bring with them to the PWCU. More recently, researchers have suggested institutional culprits as well. I conducted a path analysis to look at the relative importance of individual-difference variables and institutional variables thought to affect African-American students' expected social integration, academic integration, and academic performance. The saturated model included high school GPA and ACT score (as measures of prior academic ability), sex, mother and father's educational attainment (as measures of SES), race of three best friends and favorableness of contact with the out-group (as two separate proxy measures of intercultural anxiety),
and favorableness of campus environment for African-Americans (the manipulated variable). I conducted path analyses separately for the African-American and for the White subsamples because variables that influence them are different. Therefore, it makes sense to analyze the subsamples separately. The resulting path models consist only of those variables that were statistically significant.

**Conceptual Model for African-Americans.** Both individual-difference variables and institutional variables affect expected social integration, academic integration, and academic performance of African-American students at PWCUs. Important individual-difference variables for academic performance include prior academic ability (Cabrera et al, 1999; Pascarella & Terenzini, 1991), SES (Allen, 1998a, 1988b, 1992), study habits (Cheung & Kwok, 1998), and self-concept (Wolfe & Johnson, 1995). ICA and racial identity development affect the level of social integration African-American students anticipate (Graham, Baker, & Wapner, 1985).

Of the variables cited above, I measured SES, prior academic ability, and ICA to determine their impact upon social integration, academic integration, and academic performance. Based upon Allen's findings (1988b, 1998), I expected a direct relationship between SES and expected academic performance. I also predicted a positive association between high school GPA and expected academic performance (Allen & Haniff, 1998, Nettles et al, 1986). The relationship between ACT score and expected academic performance is less clear: some have questioned its predictive validity for academic performance of students in general (Wolfe & Johnson, 1995). Others assert that college entrance scores have no predictive value for African-

ICA affects minorities' academic performance through its impact on social integration. Consistent with research, I predicted a negative association between ICA and academic performance. Specifically, African-American students with higher levels of ICA would expect difficulty integrating into the social life of a PWCU and, given the relationship between social integration and academic integration, anticipate poorer academic performance (Graham et al, 1985).

Certain institutional characteristics affect African-American students' social integration, academic integration, and academic performance. The characteristics include racial composition (Allen, 1988b, 1992; Loo & Rolison, 1986; Person & Christensen, 1996), exposure to minority perspectives (Cabrera et al, 1999, D'Augelli & Hershberger, 1993, McNairy, 1996), incidences of racism (Feagin, 1992; Feagin et al, 1996; Gloria et al, 1999; Zea et al, 1997) institutional supportiveness (Fleming & Morning, 1998; Loo & Rolison, 1986), and size and location of the PWCU (Person & Christensen, 1996; Tuch, 1987). The campus environment manipulation included racial composition of the students and of the faculty, efforts to recruit minorities, and availability of ethnic organizations. I expected the campus environment manipulation to affect African-American students' expected social integration and academic outcomes. That is, African-American students randomly assigned to the favorable campus environment condition would anticipate higher levels of both social and
academic integration as well as better academic performance than those assigned to
the neutral or unfavorable campus environments (See Figure 1).

*Causal Model for African-Americans.* Two exogenous variables, race of three
best friends and ACT scores, had direct paths to expected social integration (See
Figure 2). Race of three best friends and expected social integration were negatively
associated (β = -0.178). Thus, African-Americans who have only other African-
Americans as best friends expected more difficulty getting socially involved at a
PWCU. On the other hand, if their best friends are from diverse racial/ethnic
backgrounds, they expected higher levels of social integration. ACT scores were
negatively associated with expected social integration (β = -0.270): those African-
American students with higher ACT scores expected lower levels of social integration
at the depicted PWCU.

As predicted, favorableness of campus environment influenced African-
American students' expectations regarding social integration. The campus
environment condition directly influenced African-Americans' expected social
integration (β = 0.249). Those participants assigned to the favorable campus
environment condition expected higher levels of social integration than those
assigned to the unfavorable campus environment condition.

Expected social integration was the only direct path to academic integration (β
= 0.575). Of all the paths in the model, this was the strongest one. Campus
environment, race of best friends and ACT score affected academic integration
through their impact on social integration. ACT score had the greatest influence of the
Figure 1 - Conceptual Path Model - Impact of high school GPA, ACT score, SES, race of best friends, favorableness of contact with out-group and campus environment on expected social integration, academic integration, and academic performance of African-Americans.
Figure 2. Path-Analytic Model: Influence of race of three best friends, ACT score, campus environment, expected social integration and academic integration on expected academic performance of African-Americans.
three ($\beta = -0.155$), followed by Campus environment ($\beta = 0.143$), and race of best friends ($\beta = -0.102$). While a favorable campus environment increased expected academic integration, being of the same race as one's best friends and scoring higher on the ACT decreased expected academic integration (See Table 12).

The next strongest path for African-Americans was the direct link between expected academic integration and expected academic performance ($\beta = 0.546$). Perhaps, this suggests that help-seeking behavior and the ability to forge close relationships with faculty at PWCU's are more important for African-American students than Whites. There was also a direct path between ACT score and expected academic performance ($\beta = 0.332$). In addition to these direct paths, campus environment, race of best friends, ACT score and expected social integration had indirect effects on expected academic performance. Campus environment influenced African-Americans' expectations regarding academic performance ($\beta = 0.078$) through its impact on expected social integration and academic integration (as did race of best friends and ACT score). African-Americans students perceiving the campus environment as favorable expected better grades. However, those with more best friends who were also African-American and those with higher ACT scores expected lower GPAs ($\beta = -0.056$ and $\beta = -0.075$ respectively). Expected social integration also exerted a positive effect on expected academic performance through its impact on anticipated academic integration ($\beta = 0.314$). (See Table 12).
### Table 12

Direct and Indirect Paths for Expected Social Integration, Academic Integration and Academic Performance

<table>
<thead>
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$X_1 =$ SES (Dad's Educational Attainment)
$X_2 =$ High School GPA
$X_3 =$ ACT Score
$X_4 =$ Race of Best Friends
$X_5 =$ Favorableness of Contact with Outgroup
$X_6 =$ Campus Environment
$X_7 =$ Social Integration
$X_9 =$ Academic Integration
$X_9 =$ Academic Performance

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In conclusion, the favorableness of campus environment impacts how African-American students expect to experience life at a PWCU—the extent to which they expect to fit in, feel comfortable, experience a sense of belonging and be socially involved—and in doing so, also influences their expectations for academic integration and academic performance. Favorable campus environments lead to more favorable expectations regarding life at a PWCU as well the development of close relationships with faculty and the facility with which they would seek academic assistance. These expectations in turn affect the likelihood of doing well academically. Clearly, then, perceptions of the campus environment impact the expectations of African-American students at PWCUs.

*Conceptual Model for Whites.* Except in the case of ICA and campus environment condition, my conceptual model for Whites mirrors that for African-Americans. While ICA and campus environment should not be related, research findings suggest similar relationships between the other variables in the model. Therefore, I expected prior academic ability and socioeconomic status to be positively related to White participants' anticipated academic performance: as high school GPA increased, I expected a corresponding increase in expected academic performance. I also anticipated a direct relationship between ACT score and expected academic performance and between Whites' expectations for social integration and academic integration. Finally, a positive relationship should exist between expected academic integration and expected academic performance (See Figure 3).
Figure 3 - Conceptual Path Model - Impact of high school GPA, ACT Score, and SES on expected social integration, academic integration and academic performance of Whites
Causal Model for Whites. As expected, the campus environment manipulation did not affect White participants' expectations for social integration, academic integration, or academic performance. Similarly, ICA did not influence their expectations. Anticipated social integration directly influenced White participants' expected academic integration ($\beta = .508$). For each unit increase in expected social integration, Whites expected a .51 increase in academic integration. Thus, the expectation of being socially involved increased their expectations for having close relationships with faculty and seeking help with their studies.

Although there was no link between expected academic integration and expected academic performance for Whites, high school GPA exerted the most influence ($\beta = .346$), followed by social integration ($\beta = .246$) and ACT score ($\beta = .164$). Therefore, increases in any one of these variables—expected social integration, high school GPA, or ACT score—are associated with expectations for better academic performance. These findings are consistent with my conceptual model: first, those who are better prepared academically should expect better academic performance; and second, those who expect higher levels of involvement in the life of the campus also should expect better grades (See Figure 4).

To summarize, the path model for the White subsample is consistent with the conceptual model. Clearly, campus environment is not important. Nor did I expect it to be—the institutional characteristics used to manipulate campus environment were not important to White students who participated in Study 1. While campus environment was not important, certain individual-difference factors were important,
Figure 4. Path-Analytic Model: Influence of high school GPA, favorableness of contact with Whites, ACT score, expected social integration, and expected academic integration on expected academic performance of Whites.

\[ R^2 = .270 \]
namely, those items used to measure prior academic preparation. White students who earned higher grades in high school and scored higher on the ACT test expected better grades during their first year at college. By contrast, SES and ICA did not influence any of the dependent variables. While the model suggested no relationship between ICA and the dependent variables, a direct relationship was posited between SES and academic performance. In this research, SES had no effect upon Whites’ expectations regarding academic performance.

**Comparison of African-American and White Students’ Expectations**

The conceptual model suggested that individual-difference characteristics influence students’ expectations. ICA and prior academic preparation were important individual-difference variables. Two measures of ICA were used, race of three best friends and favorableness of contact with the out-group. Neither of the ICA measures affected Whites’ expectations. Race of three best friends, on the other hand, was directly related to African-Americans' expected social integration and indirectly related to their expected academic integration and academic performance. In each instance, race of three best friends was negatively associated. Consistent with the model, having three best friends of the same race decreased African-Americans' expectations for social and academic integration as well as for academic performance.

The path analysis indicates that prior academic preparation is also an important individual-difference variable for the participants. While ACT score was related to the expected academic performance for both groups, high school GPA did not impact African-Americans’ expectations. ACT score had a direct link to expected
academic performance for both African-Americans and Whites. Interestingly, the
direct link was greater for African-American students ($\beta = .332$) than White students
($\beta = .164$). Thus, as ACT scores increased, African-American students expected
greater increases in their first semester and first year GPAs relative to White students.
There was also an unexpected link between ACT score and expected social
integration for African-Americans; those with higher ACT scores expected lower
levels of social integration.

In addition to individual-difference variables, campus environment influenced
African-American, but not White, students' expectations. Campus environment
affected expected social integration for African-American students directly. Campus
environment also indirectly influenced African-Americans' expected academic
integration through its impact on expected social integration. Finally, campus
environment influenced African-American participants' expected academic
performance through its link with both expected social integration and expected
academic integration. Therefore, favorableness of campus environment has serious
implications for African-American students' expectations for both social integration
and academic outcomes at a PWCU.

While the path model for African-Americans was different from the path
model for Whites, both models demonstrated the important role of social integration.
Expected social integration was important for both expected academic integration and
expected academic performance of African-Americans and Whites. It exerted the
greatest effect on African-Americans' expectations. With each increase in expected
social integration, African-American students' expected academic integration increased .575, and their expected academic performance increased .314. By contrast, Whites' expected academic integration and academic performance increased .508 and .246 respectively. Hence, while expected social integration has important implications for all participants, it appears to be more important for African-Americans at a PWCU. Those who did not expect to be socially integrated (fit in, feel comfortable, and be involved) or expected to be less socially integrated also expected to be less academically integrated.

Discussion

The present research consisted of asking students to examine web pages of a fictitious PWCU that had either an unfavorable, neutral or favorable campus environment for African-Americans. They were then asked about their expectations for social integration, academic integration, and academic performance. The research results demonstrate the important role of social integration for all students and the importance of campus environment for African-American students. It is quite likely that the effect would have been greater had students actually experienced the campus environment over an extended period of time rather than forming impressions after reading a brief profile. Brown (1998) found that length of time interacting with White TAs and professors matters: African-American and Latino students who anticipated having a White TA for a semester expected less fair evaluations than those who anticipated a tutoring session or a review session with a White TA. In addition, existing research suggests that the actual effects of an unfavorable campus

Findings are generally consistent with the hypotheses, clearly demonstrating the adverse effects of an unfavorable campus environment for African-American students. First, in such an environment, African-American students expect greater difficulty in developing close relationships with faculty members. In addition, relative to Whites, they thought they would be less likely to ask questions in class. Although this research deals with expected rather than actual experiences, the findings are consistent with many studies of African-American students' experiences at PWCUs: they are less integrated academically than White students (Allen, 1988a; Castenell, 1998). Therefore, African-American students who attend PWCUs with unfavorable campus environments may not do as well academically because their perception of the campus environment negatively impacts their academic integration.

Second, African-American students who were presented with an unfavorable campus environment anticipated poorer academic performance at a PWCU. Regardless of their prior academic ability, as measured by high school grade point average and ACT scores, African-American participants expected significantly lower grade point averages than White participants. This finding supports other studies that revealed a gap between the academic performance of minorities and Whites at PWCUs (Allen, 1988b, 1992, Powell, 1998). While Powell surmised that African-American "students suffer academically because of the way they experience their environment" (1998, p.99), this study suggests that African-American students expect
to suffer academically because of the way they expect to experience an unfavorable campus environment. As one participant remarked, "Unbelievable. Why would any African-American want to go there? It seems they are not concerned with minorities."

Third, African-American students are even more pessimistic about the quality of social integration they would experience at a PWCU with an unfavorable campus environment. My findings are consistent with those that suggest African-Americans are less likely than White students to believe that campus activities would reflect their interests (Allen & Haniff, 1991). In addition, when faced with an unfavorable campus environment, African-American students anticipate they will not be as comfortable, valued, or socially connected to their peers. They anticipate the same sense of alienation that other studies suggest African-American students at PWCUs actually experience (Hurtado, 1992; Loo & Rolison, 1986; Powell, 1998).

Collectively, the findings of Study 2 are significant because the African-American participants arrived at these conclusions based on characteristics that a different group of African-Americans had previously identified as important for determining whether they would fit in and feel welcome at a PWCU. Therefore, these university characteristics communicate something to African-American students about the campus environment that has important consequences for their social and academic integration as well as their academic performance. When institutional characteristics suggest an unfavorable campus environment for African-Americans, they do not expect to be able to forge those relationships (social or academic) that
previous research suggests are important for high academic performance, persistence, or overall satisfaction. Instead, they expect to remain on the fringes of the university and experience the concomitants of that isolation—poor academic integration and poor academic performance.

Contribution to Research on African-American Students at PWCUs. Recent research has examined the academic performance, social integration, and persistence to graduation on the part of African-American students at PWCUs as a function of campus racial climate. Study 2 also sought to better understand the academic performance and social involvement of African-American students at PWCUs. However, it differed from previous studies in two important ways. First, it was designed using institutional characteristics that Study 1 demonstrated to be very important for African-American students' perceptions of campus environment. To my knowledge, no research of this nature has first determined what is important to the African-American student and subsequently used that information in designing research. Instead of asking students about academic performance, social integration, academic integration, etc. and then seeking some correlation between these and institutional characteristics at the institutions these students attended, my research first posed the question, "How important are these institutional characteristics for ascertaining how socially comfortable you would be at a PWCU?" The responses yielded a set of institutional characteristics to which White students were indifferent, but to which African-American students were attuned. Those characteristics were
manipulated in Study 2 in an effort to further examine the relationship between institutional characteristics and African-American students' expected outcomes.

Second, Study 2 looked at the role of campus environment by asking students to project themselves into a situation and respond to a set of questions regarding academic performance, academic integration, social integration and quality of life. Therefore, actual experiences were not studied; instead, this research focused on expected outcomes as a function of institutional characteristics. In doing so, I was able to demonstrate that institutional characteristics that previous research suggests is related to poorer outcomes for minorities at PWCUs influence the expectations of African-Americans who matriculate at such schools.

Measuring expectations rather than actual experiences has a two-fold advantage. First, the research uses participants who are not students at the university depicted, and therefore, have not made a commitment to the institution that they are evaluating. Dissonance theory suggests that once people commit themselves to a line of action (in this instance, the decision to attend a given college or university), they are less likely to evaluate it negatively. Instead, there is an increased likelihood that they will evaluate it more positively (Murphy & Miller, 1997) in an effort to reduce any dissonance resulting from their commitment. In measuring reactions of students attending a given institution, dissonance reduction could obscure the real effects. My study precludes that because the participants are responding without having made the decision to go to the school depicted in the profile.
A second advantage is that the effects of a role play are presumably much weaker than the effects of actual perceptions. Social psychology of persuasion suggests that people are more attuned to that which is self-relevant because it has implications for their well-being (Petty, Cacioppo, & Goldman, 1981). This being the case, one would expect that the effects uncovered in this research would be even stronger if the participants were actual students at the depicted university because these institutional characteristics would be self-relevant. That is, while African-American students in this study expected negative consequences, those who are actually experiencing an unfavorable campus environment, not simply imagining it, should report an even greater negative impact because the campus environment really matters to them; it affects their day-to-day experiences.

This research also contributes to the existing debate regarding the role of institutional versus individual characteristics in African-American students' experiences at PWCU's. The findings suggest that neither the individual deficit model nor the institutional characteristics model alone explains the experiences of African-American students. Instead of an either-or explanation, the present research suggests that both individual-difference characteristics (high school GPA, ACT score, race of three best friends) and institutional characteristics (manipulated in the campus environment condition) are important for understanding social integration and academic outcomes of African-American students at PWCU's. Institutional characteristics influenced African-American individuals' perceptions of the institution that, in turn, affected their responses to the institution. In the unfavorable campus
environment, African-American (but not White) participants expected to be less comfortable and thus, they were less willing to take the initiative to ask questions. Therefore, institutional characteristics affected African-Americans’ perceptions uniquely, and those perceptions clearly affected their expectations for the quality of their social and academic life at a PWCU.

*Practical Implications of the Research.* This research has practical implications for college and university administrators, high school counselors, and African-American students. First, it suggests to administrators that African-American students are sensitive to the institutional characteristics that they present in their promotions of the institution. Specifically, they are attuned to those characteristics that suggest something to them about the institution's campus environment. Thus, while the academic reputation of the institution may be important, it is not the only important factor African-American students consider. In fact, in a qualitative study of gifted African-American students who ranked academic prestige as the most important factor, quality of life was still important (King, 1997). Many of their comments echoed the findings of this study: the importance of an inclusive curriculum that exposed all students to diverse cultures, racial composition of the institution, feeling comfortable, and a source of support. One student, in explaining his interest in a prestigious university, noted, “I can always come back on the weekends to get the support of my family (King, 1997, p. 15)” He added that while the other college which he was considering was in Tennessee (quite far from home), it would provide comfort because it was a HBCU. As such, “[he could] get the
support from [his] own people [who would be] going through the same struggles [he was] going through (King, 15).”

Second, the results from this study suggest that information about the campus environment affects African-American students’ expectations for quality of life and academic achievement. Relative to the White participants, African-American participants who read a profile of an unfavorable campus environment expected to feel significantly less welcome, happy, and comfortable. In addition, they anticipated a lower sense of belonging, and did not expect campus activities to reflect their interests. These students also expected significantly lower GPAs relative to Whites when prior academic performance was held constant. It seems likely, then, that these characteristics would affect African-American students’ application decisions. Institutions that lack racial diversity (in both its student body and faculty) and whose advertising suggests a lack of interest in (i.e., recruitment efforts), or lack of support for (i.e., ethnic organizations), African-American students, may be limiting their pool of applicants. Therefore, college and university administrators should consider both the nature of their campus environments and the messages they are communicating about those environments to potential African-American applicants.

This study also provides useful information for guidance counselors who work with African-American students in the college selection process. It identifies institutional characteristics that the students are likely to deem important as they investigate different colleges and universities. It also provides information about the impact of those characteristics upon expected quality of life and academic outcomes.
As students engage in the college search process, counselors can help them consider the implications of campus environment. This does not mean that African-American students should not attend PWCUUs but that they should know what to expect and how to cope at a PWCU. McNairy suggests that gifted minority students often arrive at a PWCU expecting to be embraced (after having been recruited heavily by the PWCU) and are shocked to find a rather chilly climate. Padilla (2002) adds that in order to be successful at a PWCU, minority students must learn how to overcome the barriers to success (e.g., racial isolation, lack of minority role models, lack of cultural fit between the student and the institution). Using this study, counselors can provide an important educative function that better prepares African-American students for the challenges they will likely face at a PWCU by helping them to anticipate the barriers and develop effective coping strategies.

Limitations. While Study 2 demonstrates the negative consequences of an unfavorable campus environment for African-American students, it is not without limitations. The first limitation is the manner in which the favorable campus environment was manipulated. Possibly, the favorable campus environment was not viewed as favorably as anticipated. As Allen notes, "the setting itself [of the university] can either facilitate or frustrate the efforts of black students to perform well academically" (1992, p. 37). While the unfavorable campus environment condition clearly frustrated the expectations of African-American students, the favorable condition did not facilitate the African-American students' anticipated academic performance to the extent expected. The failure to observe statistically
significant differences between the favorable and unfavorable campus environments may have resulted from a weak manipulation of the favorable campus environment condition. In fact, one student questioned the favorableness, noting that the campus was not diverse enough and that the manner in which African-American students were depicted (absence of cross-racial interaction; African-Americans were on the fringes in group pictures) suggests that they were marginalized. Future studies should incorporate these considerations when manipulating campus environment.

A second limitation stems from the use of a complicated manipulation of the independent variable, campus environment (Carlsmith, Ellsworth & Aronson, 1976). While this study suggests a relationship between favorableness of campus environment and expected outcomes—academic integration, social integration, academic performance, and overall attitude—the manner in which campus environment was manipulated does not enable one to determine whether a specific institutional characteristic or all of the characteristics in combination accounts for African-American students' perceptions of campus environment. In this study, however, I was only interested in whether all four characteristics had any effect at all, not the importance of any one characteristic. This study clearly suggests that these characteristics matter. However, an implicit limitation is the inability to determine which of these characteristics matter. Further research is needed to address this question.

*Directions for Future Research.* Two findings in Study 2 suggest the need for further studies. First, African-American students with higher ACT scores expected
lower social integration. It is possible that those African-American students with higher ACT scores attend PWCUs expecting that they will be discriminated against and therefore, do not anticipate getting involved because it would be painful to do so. They may also think that, given their academic ability, they will be a threat to Whites who, in turn, might discriminate against them. This is consistent with Kanter’s (1977) finding that tokens experience pressure to perform well but at the same time, to stop short of out-performing the dominants. Minorities in the workplace also perceive this pressure and sometimes resort to invisibility and self-imposed isolation as coping mechanisms (Cosé, 1993, Thomas & Wetlaufer, 1997).

Some high achieving students have not felt valued by their professors. One student reported that his work was returned with “E—this does not sound like your work” (Feagin et al, p. 37). This incident would suggest that academically talented African-American students experience the same types of pressures experienced in the workplace and may try to avoid them by limiting their social involvement with Whites at PWCUs. However, the inverse relationship between prior academic ability and social integration may have nothing to do with the campus environment. Those with higher ACT scores may simply study more, and therefore, anticipate lower levels of social involvement. Future studies should further explore this relationship between prior academic preparation and expected social integration.

Second, future studies should examine the absence of a link between expected academic integration and expected academic performance for Whites. This unexpected finding may suggest a poor operationalization of academic integration. As
operationalized, academic integration did not measure involvement in class discussions or willingness to seek help of one's classmates. In addition, in an effort to limit the number of variables in the path model, I combined all of the items used to measure academic integration even though their correlations were low; this may have contributed to the finding. The absence of a link between expected academic integration and expected academic performance for White students should be investigated in future research.

The manner in which this research was conducted also suggests possible research. This study looked at the relationship between perceptions of campus environment on the part of African-American students and the consequences of those perceptions. While the existing literature regarding non-Asian minority students at PWCU's suggests that the relationships uncovered in my research might hold for them as well, studies should be done to determine whether the findings are indeed similar for other non-Asian minorities.

In addition, this research dealt with African-American students' expectations based upon their perceptions of campus environment. While the results are interesting, it is important to note that they deal only with expectations. Social psychological literature has demonstrated, however, the lack of congruence between role play and actual experience. Behavior is a function of one's situational context (LaPierre, 1934; Zimbardo, 1972; Milgram, 1963). Therefore, performance expectancies in actual situations might differ from performance expectancies in imagined situations. Future research should select institutions with characteristics that...
match an unfavorable or favorable campus environment and measure the actual performance and quality of life of both African-American and White students at those institutions. In doing so, researchers can determine whether and how these institutional characteristics impact the actual quality of life, academic integration, and academic performance of African-American and White students.

It is also possible that the characteristics used to manipulate campus environment are particularly relevant to the willingness of African-American students at PWCU to ask questions in class. This raises the question of whether using different characteristics or additional characteristics to manipulate campus environment would yield different results. Future research is also needed to identify the effects of specific institutional characteristics on each of the dependent variables.
Summary and Conclusion

This research supports the hypothesis that an unfavorable campus environment for African-Americans will have adverse effects on their experiences at a PWCU. While other research has highlighted the important role of campus environment for the experiences of African-American students at PWCUs, this study is novel in that its results rest upon first identifying those institutional characteristics that African-American students themselves consider indicative of an unfavorable campus environment. In Study 1, I asked the participants to indicate the extent to which they would consider various institutional characteristics to determine how socially comfortable—the extent to which they would fit in and feel welcome—they would be on a PWCU campus. A factor analysis of those characteristics yielded two factors: general institutional characteristics (e.g., size of the institution and academic reputation of the faculty) and campus environment characteristics (e.g., racial composition of the student body and the institution's efforts to recruit minorities). The Student's t-test was performed to determine whether significant differences existed between African-American and White students for each type of institutional characteristic. While there was no significant difference in the extent to which each group considered general institutional characteristics, African-Americans (but not Whites) deemed campus environment characteristics to be important for their anticipated social comfort. This information was used for Study 2.
In Study 2, I used four of the institutional characteristics that the sample of African-American students indicated as important determinants of social comfort in Study 1 to manipulate campus environment. I randomly assigned a different group of participants to either a favorable, neutral, or unfavorable campus environment for African-Americans and asked them to imagine themselves as students at that PWCU. They were then asked to indicate their expectations for social and academic integration, academic performance, and overall attitude toward the depicted university.

The results demonstrated the negative impact of an unfavorable campus environment on African-American students' expectations. Perceptions of campus environment as a function of how these institutional characteristics were manipulated influenced African-American students' expectations. Whereas the unfavorable campus environment did not adversely affect White students, African-American students thought they would have poorer relationships with faculty, have greater difficulty forming interpersonal relationships, experience less academic success, and have a poorer overall attitude toward the institution. Clearly, an unfavorable campus environment had a negative impact on African-American students' expectations. If additional research demonstrates that real universities with such environments impact African-American students in comparable ways, it will provide valuable information to PWCU's regarding the importance of the campus environment as well as strategic areas that need to be addressed on their respective campuses to increase the comfort.
level (and in doing so, the academic and social integration, academic performance, and overall attitude toward the PWCU) of African-American students.
END NOTES

1. *Campus environment* is being used in lieu of campus racial climate because it is a more inclusive term. “Racial climate” is more narrowly defined in terms of students’ perception of prejudice and discrimination. While “campus environment” would include racial climate, it also includes the institution’s size, opportunities for positive personal contact with faculty, staff, and peers, and students’ attitudes about the institution’s concern for all students. Hurtado, Milem, and Clayton-Pedersen (1998) suggest that the more narrow view of racial climate is a weakness of previous studies and that the concept should be broadened to include the institution’s historical legacy of inclusion/exclusion (its goals for desegregation/integration as well as relative number of persons of color in the institution), psychological climate (perceptions and attitudes between and among different racial/ethnic groups on campus) and behavioral dimensions (nature of relationships among the various groups on campus).

2. It should be noted that differences exist among the Historically Black Colleges and Universities in terms of selectivity and socioeconomic status of its students. However, in general, African-Americans at these colleges are disadvantaged when compared to their peers at predominantly white institutions.

3. These are average scores for 1997 as provided by the National Center for Education Statistics, 1998, Table 133.

4. The percentage of African-Americans taking these courses fell between those of Hispanics and American Indians: 2.7, 2.1, and 1.4 percent of African-American high school students enrolled in AP biology, chemistry, and physics respectively.

5. 4 English, 3 social studies, 3 science, 3 math, 0.5 computer science, and 2 foreign language units. A unit is equivalent to 1 year.

6. This is consistent with Augenlick, Van de Water and Associates’ finding that students whose jobs were related to their academic majors or career interests performed better academically relative to those whose jobs were unrelated. This has interesting implications for those who must work: work in one’s area of interest will facilitate academic performance.
7. While African-American students who attend PWCUs are more likely to have mothers who attended college (Allen and Haniff, 1991) than students at HBCUs, many of these students' parents did not attend PWCUs. Thus, they are less prepared to help their students cope with stressors unique to attending PWCUs.

8. Hurtado (1992) measured an institution's commitment to diversity by the extent to which the institution sought to increase minority representation (students, faculty, and administrators), develop a multicultural environment on campus, and increase student and faculty appreciation for multiculturalism.

9. Relationships with faculty was the most important predictor of academic achievement.

10. The study was conducted in some African-American student organizations to get an adequate sample size of African-American students.

11. Perhaps, this is not surprising because both sets of items suggest something quite conceptually similar—comfort and belonging.

12. Shavelson (1996) suggests that analysis of covariance (ANCOVA) should be used when individual differences (in this case, ICA) are related to the dependent variable. ANCOVA removes the contribution of the covariate, thereby providing a more powerful test of the null hypothesis. Cohen (1983) suggests that ANCOVA should be performed to increase one's ability to detect the treatment effects. Criteria for ANCOVA were met. Specifically, favorableness of contact with whites was statistically significant ($p = .014$), and there was no interaction effect of favorableness of contact with the other independent variables.

13. Main effect of race for involvement in campus organizations $F(1, 422) < 1$; main effect of campus environment condition, $F(2, 422) < 1$; campus environment x race interaction effect, $F(2, 422) < 1$. Mean comparisons for African-American students across campus environment conditions, $t(78) < 1$; mean comparisons for White students across campus environment conditions, $t(344) < 1$. Mean comparisons of African-American and White students in each campus environment condition, $F(1, 422) < 1$.

14. $r_{hsgpa, semgpa} = .41, p < .001; r_{hsgpa, yrsgpa} = .39, p < .001; r_{semgpa, yrsgpa} = .86, p < .001$.

15. The same pattern of results was found when ACT served as a covariate.
End Notes—Continued

16. Whites comprise the out-group for African-Americans while African-Americans are the out-group for Whites.

17. However, one might find a relationship between intercultural anxiety and Whites expected social integration at HBCUs, HSIs, and tribal colleges, educational institutions whose racial composition is predominately non-White.
Appendix A

Campus Climate Survey
We are interested in gaining a better understanding of how students decide whether they would feel socially comfortable—fit in and feel welcome—on a given college campus. As one who has made, or will soon be making, that decision, we are asking you to participate in this survey. You will be providing valuable information that could help colleges and universities provide the quality of life that students desire.

Imagine that you have been accepted at a predominantly white college or university. It offers the major(s) in which you are interested and has a strong academic reputation. Now, you must decide whether you’d feel socially comfortable (fit in and feel welcome) there.

Listed below are 21 characteristics on which colleges and universities differ. When determining how socially comfortable you would be as a student at a predominantly white college, to what extent would you consider each of the following characteristics? “Definitely not consider” means that that characteristic would not affect how comfortable or uncomfortable you would feel. “Definitely consider” means that the characteristic would be very important in influencing how comfortable or uncomfortable you would feel.

KEEP IN MIND THAT WE ARE ONLY INTERESTED IN WHAT IT IS ABOUT A COLLEGE THAT WOULD HELP YOU DECIDE WHETHER YOU WOULD BE COMFORTABLE OR UNCOMFORTABLE AS A STUDENT. We are not interested in how you would evaluate the academic prestige of the college.

<table>
<thead>
<tr>
<th></th>
<th>Definitely Not Consider</th>
<th>Definitely Consider</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent would you consider financial aid targeted for minorities in determining whether you’d feel socially comfortable?</td>
<td>1...2...3...4...5...6...7</td>
<td></td>
</tr>
<tr>
<td>To what extent would you consider attractiveness of the campus in determining whether you’d feel socially comfortable?</td>
<td>1...2...3...4...5...6...7</td>
<td></td>
</tr>
<tr>
<td>To what extent would you consider distance from home in determining whether you’d feel socially comfortable?</td>
<td>1...2...3...4...5...6...7</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Definitely Not Consider</td>
<td>Definitely Consider</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>To what extent would you consider racial composition of student body in determining whether you'd feel socially comfortable?</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>To what extent would you consider extra-curricular programming in determining whether you'd feel socially comfortable?</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>To what extent would you consider whether there are ethnic student organizations on Campus in determining whether you'd feel socially comfortable?</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>To what extent would you consider quality of food service in determining whether you'd feel socially comfortable?</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>To what extent would you consider quality of campus facilities in determining whether you'd feel socially comfortable?</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>To what extent would you consider racial composition of staff members (admissions, counseling, library, etc.) in determining whether you'd feel socially comfortable?</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>To what extent would you consider size of library in determining whether you'd feel socially comfortable?</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>To what extent would you consider location of university (urban, rural, suburban) in determining whether you'd feel socially comfortable?</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>To what extent would you consider the institution’s efforts to recruit minority students in determining whether you'd feel socially comfortable?</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
</tbody>
</table>
To what extent would you consider **prestige of the university** in determining whether you'd feel socially comfortable?

1...2...3...4...5...6...7

To what extent would you consider **racial composition of faculty members** in determining whether you’d feel socially comfortable?

1...2...3...4...5...6...7

To what extent would you consider **reputation of faculty** in determining whether you’d feel socially comfortable?

1...2...3...4...5...6...7

To what extent would you consider **availability of Ethnic Studies Courses** in determining whether you’d feel socially comfortable?

1...2...3...4...5...6...7

To what extent would you consider **racial composition of President's Cabinet** in determining whether you’d feel socially comfortable?

1...2...3...4...5...6...7

To what extent would you consider **strength of academic program in areas of interest** in determining whether you’d feel socially comfortable?

1...2...3...4...5...6...7

To what extent would you consider **total cost of attending college** (after subtracting grants and scholarships) in determining whether you’d feel socially comfortable?

1...2...3...4...5...6...7

To what extent would you consider **opportunities for contact with minority faculty outside of class** in determining whether you’d feel socially comfortable?

1...2...3...4...5...6...7

To what extent would you consider **internet access in dormitories** in determining whether you’d feel socially comfortable?

1...2...3...4...5...6...7
To what extent would you consider quality of athletic programs in determining whether you'd feel socially comfortable?

Can you think of other institutional characteristics that you would consider to determine your social comfort level? If so, please list each characteristic and rate the extent to which you would consider it when determining how socially comfortable you would be as a student at a predominantly white college using the following scale (1 = definitely not consider; 7 = definitely consider).

Please answer the following questions about yourself.

1. Race __________________________________________

2. Gender [ ] Male [ ] Female

3. High School Grade Point Average (4.0 = A; 3.0 = B; 2.0 = C). Check only one.
   [ ] Less than 2.0 [ ] 3.00 - 3.39 [ ] Don’t know
   [ ] 2.00 - 2.39 [ ] 3.40 - 3.69
   [ ] 2.40 - 2.69 [ ] 3.70 - 3.99
   [ ] 2.70 - 2.99 [ ] 4.00

- [ ] Top 5% of Class (95-100 percentile)
- [ ] Top 15% of Class (85-100 percentile)
- [ ] Top Fifth of Class (80-100 percentile)
- [ ] Top Fourth of Class (75-100 percentile)
- [ ] Top Third of Class (67-100 percentile)
- [ ] Top Half of Class (50-100 percentile)
- [ ] Bottom Half of Class (less than 50\textsuperscript{th} percentile)
- [ ] Don't know

5. Class

- [ ] High School Senior
- [ ] College Freshman
- [ ] College Sophomore
- [ ] College Junior
- [ ] College Senior

6. Have you taken the ACT or SAT?  

- [ ] Yes
- [ ] No (please skip to number 7)

<table>
<thead>
<tr>
<th>What was your ACT score?</th>
<th>[ ] Less than 11</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ ] 11-15</td>
</tr>
<tr>
<td></td>
<td>[ ] 16-20</td>
</tr>
<tr>
<td></td>
<td>[ ] 26-30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What was your SATI (Verbal + Math) score?</th>
<th>[ ] Less than 500</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ ] 500-510</td>
</tr>
<tr>
<td></td>
<td>[ ] 520-580</td>
</tr>
<tr>
<td></td>
<td>[ ] 590-650</td>
</tr>
<tr>
<td></td>
<td>[ ] 660-700</td>
</tr>
<tr>
<td></td>
<td>[ ] 710-750</td>
</tr>
<tr>
<td></td>
<td>[ ] 760-800</td>
</tr>
<tr>
<td></td>
<td>[ ] 810-850</td>
</tr>
<tr>
<td></td>
<td>[ ] 860-900</td>
</tr>
</tbody>
</table>

7. Think of your three best friends. How many of them are from the same racial/ethnic background?  

- [ ] 0
- [ ] 1
- [ ] 2
- [ ] 3

8. Do you plan to attend college?  

- [ ] Yes
- [ ] No (please skip to number 9)

**College students should skip to 8b.**

8a. What college do you want to attend?  

1st choice _________________________ 2nd choice _________________________

8b. How do you think you will compare academically to the average student at the college you attend?  

- [ ] I will earn better grades than the average student.
- [ ] I will do as well as the average student.
- [ ] I will earn poorer grades than the average student.
9. What is the highest level of education attained by your parent(s) or guardian(s) with whom you live?

<table>
<thead>
<tr>
<th>Mother</th>
<th>Father</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Less than high school</td>
<td>[ ] Less than high school</td>
</tr>
<tr>
<td>[ ] Some high school</td>
<td>[ ] Some high school</td>
</tr>
<tr>
<td>[ ] High school graduate</td>
<td>[ ] High school graduate</td>
</tr>
<tr>
<td>[ ] Some college</td>
<td>[ ] Some college</td>
</tr>
<tr>
<td>[ ] Bachelor's Degree</td>
<td>[ ] Bachelor's Degree</td>
</tr>
<tr>
<td>[ ] Master's Degree</td>
<td>[ ] Master's Degree</td>
</tr>
<tr>
<td>[ ] Professional/Doctorate</td>
<td>Professional/Doctorate</td>
</tr>
</tbody>
</table>

10. If employed, what is your father's occupation?

_____________________________________________________________________

11. If employed, what is your mother's occupation?

_____________________________________________________________________
Appendix B

Assent Form for High School Respondents
Consent Form for Western Michigan University Students
You are invited to participate in a research project entitled "Campus Climate Survey," designed to determine which characteristics students consider when deciding whether they would feel socially comfortable—i.e., fit in and feel welcome—on a predominantly White college campus. This project is being conducted by Dr. Thomas Ford and Brenda King from Western Michigan University, Department of Sociology. This research is being conducted as part of the dissertation requirements for Brenda King.

This survey is comprised of 21 characteristics on which colleges and universities may differ. You will simply be asked to rate the extent to which you would consider each characteristic to determine how comfortable you personally would feel. It will take approximately 10 minutes to complete. Your replies will be completely anonymous, so do not put your name anywhere on the form. You may choose to not answer any question and simply leave it blank. If you choose to not participate in this survey, you may return the blank survey or you may discard it in the box provided. Returning the survey indicates your consent for use of the responses you supply. If you have any questions, you may contact Professor Ford (616-387-5280), Brenda King (616-247-7689), the Human Subjects Institutional Review Board (616-387-8393), or the Vice President for Research (616-387-8298).

Thank you for your participation.

Date

Note: This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB), as indicated by the stamped date and signature of the board chair in the upper right corner. Subjects should not complete this document if the corner does not show a stamped date and signature.
Appendix C

Passive Consent Letter to Parent or Guardians
Dear Parent or Guardian,

Your child will be invited to participate in a research project entitled “Campus Climate Survey.” The purpose of the study is to determine which characteristics students consider when deciding whether they would feel socially comfortable—i.e., fit in and feel welcome—on a predominantly White college campus. This project is being conducted to fulfill Brenda King’s dissertation requirement.

Your permission for your child to participate in this project means that your child will be administered the Campus Climate Survey at his/her school. The survey consists of 21 characteristics on which colleges and universities may differ. Your child will be asked to rate the extent to which he/she would consider each characteristic to determine how socially comfortable he/she would feel. It will take about 10 minutes to complete. Your child will be free at any time—even during the administration of the survey—to choose not to participate. If your child refuses or quits, there will be no negative effect on his/her grades.

This is an anonymous survey. That means that your child’s name will not be on the survey. Your child will be told not to place his/her name anywhere on the survey. Once the data are collected and analyzed, the data will be stored for three years in a locked file in the principal investigator’s office.

If your child participates in this study, the only risks anticipated are minor discomforts typically experienced by students when they are providing basic information about themselves (e.g., boredom).

You may withdraw your child from this study at any time without any negative effect on services to your child. If you have any questions or concerns about this study, you may contact either Dr. Thomas E. Ford at (616) 387-5260, Brenda King at (616) 387-7069. You may also contact the chair of the Human Subjects Institutional Review Board at (616) 387-8293 or the Vice President for Research at (616) 387-9298 with any concerns that you have.

If you do not want your child to participate in this research project, please sign this form and return it to your child’s school prior to next week.

Thank you.

[Signature of Parent or Guardian]

This permission document has been approved for use for one year by the Human Subjects Institutional Review Board as indicated by the stamped date and signature of the board chair in the upper right corner. Please sign and return this document indicating that you wish your child not to participate if the corner does not have a stamped date and signature.
Appendix D

Institutional Perceptions Survey:
Tell Us What You Think
Tell Us About Yourself
Tell Us What You Think

Imagine that you are a student at Whitmore. Please tell us how you think you'd experience life at Whitmore. Respond to the following questions using the following ratings: 1 = *strongly disagree*, 7 = *strongly agree*. Thank you.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I would not feel valued as a student on this campus.</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>2. I would have to &quot;prove&quot; my abilities (i.e., work twice as hard) to receive the same level of respect as students of the opposite sex.</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>3. I would be involved in at least one organization.</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>4. I would feel as if I belong here.</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>5. I would feel comfortable in this university environment.</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>6. It would be difficult for me to develop close relationships with Whitmore faculty members.</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>7. If I were doing poorly in class, I would go to my professor for help.</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>8. I feel that I would have to change myself to fit in at this school.</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>9. I believe I could reach my full academic potential at Whitmore.</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>10. There would be activities on campus that reflect my interest.</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>11. I would often feel socially isolated.</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>12. I would have to &quot;prove&quot; my abilities (i.e., work twice as hard) to receive the same level of respect as students whose race is different from my own.</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>13. I would feel free to ask questions in class.</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
<tr>
<td>14. It would be difficult to meet and make friends.</td>
<td>1.....2.....3.....4.....5.....6.....7</td>
<td></td>
</tr>
</tbody>
</table>
15. I would be very happy as a student here.

16. I would do very well academically at Whitmore.

17. I would not recommend Whitmore to my friends.
Tell Us About Yourself

1. Age ____________
2. Gender [ ] Male [ ] Female

3. Year in College [ ] Freshman [ ] Sophomore [ ] Junior [ ] Senior

4. Race/Ethnicity (please check one)
[ ] Alaskan Native [ ] Caucasian [ ] Pacific Islander
[ ] American Indian [ ] Hispanic [ ] Other __________________

5. What is the highest level of education attained by your parent(s) or guardian(s).

<table>
<thead>
<tr>
<th>Mother</th>
<th>Father</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Less than high school</td>
<td>[ ]</td>
</tr>
<tr>
<td>[ ] Some high school</td>
<td>[ ]</td>
</tr>
<tr>
<td>[ ] High school graduate</td>
<td>[ ]</td>
</tr>
<tr>
<td>[ ] Some college</td>
<td>[ ]</td>
</tr>
<tr>
<td>[ ] Bachelor's Degree</td>
<td>[ ]</td>
</tr>
<tr>
<td>[ ] Master's Degree</td>
<td>[ ]</td>
</tr>
<tr>
<td>[ ] Professional/Doctorate Degree</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

6. Think of your three best friends. How many of them are from the same racial/ethnic background as you? [ ] 0 [ ] 1 [ ] 2 [ ] 3

7. High School Grade Point Average (4.0=A; 3.0=B; 2.0 = C). Check only one.

| [ ] Less than 2.0 | [ ] 2.70-299 | [ ] 3.70-3.99 |
| [ ] 2.00-2.39 | [ ] 3.00-3.39 | [ ] 4.00 |
| [ ] 2.40-2.69 | [ ] 3.40-3.69 | [ ] Don't know |

8. Did you take the ACT [ ] Yes [ ] No (Please skip to number 9)

<table>
<thead>
<tr>
<th>What was your ACT score?</th>
<th>If you took it more than once, record only the highest score.</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Less than 11</td>
<td>[ ] 21-23</td>
</tr>
<tr>
<td>[ ] 12-14</td>
<td>[ ] 24-26</td>
</tr>
<tr>
<td>[ ] 15-17</td>
<td>[ ] 27-29</td>
</tr>
<tr>
<td>[ ] 18-20</td>
<td>[ ] 30-32</td>
</tr>
</tbody>
</table>

9. My contact with Whites has been [ ] mostly positive [ ] mostly negative [ ] equally positive and negative

10. My contact with African-Americans has been [ ] mostly positive [ ] mostly negative [ ] equally positive and negative
11. Given what you know about Whitmore, how well do you think you’d do?
   a. What GPA do you think you’d earn after one semester? __________
   b. What GPA do you think you’d earn after one year? __________

12. Write one sentence describing your reaction to this study.
Appendix E

Manipulation of Independent Variable:
Unfavorable Campus Environment
Welcome to Whitmore

Known for its commitment to providing a high-quality, personalized education, Whitmore University is one of the top institutions in the country. With a strong focus on small class sizes, personalized attention, and a wide range of programs in the sciences, arts, and humanities, Whitmore is a place where students can thrive.

Look us over. Admittedly, the website is no substitute for a personal visit, but it will give you a good idea of why Whitmore ranks among the best. If, after reviewing our website, you want additional information or would like to arrange a visit to the campus, please contact the Admissions Office. Of course, if you know Whitmore is a place you'd like to be, we welcome your application.

* Barron's Guide to Colleges & Universities
  U.S. News & World Report
Founded: 1863

Type of College: Private, Liberal Arts, Residential, Coeducational

Degrees Offered: Bachelor of Arts, Bachelor of Social Work, Bachelor of Science

Size of Campus: 135 acres, 45 buildings, 14 dormitories, 7 Greek Houses

Enrollment: 3000 full-time students

Gender: 49% males; 51% females

Race/Ethnicity: 2% African-Americans, 2% Latinos, 3% Asian-Americans, 89% Whites, 4% Internationals.

Geographic Representation: 35% Michigan; 61% from rest of country; 4% from foreign countries.

Faculty: 125 full-time. 25 adjunct; 90% hold doctoral degrees

Gender: 68% males; 32% females

Race/Ethnicity: 1% African-Americans, 0.5% Asian-Americans, 98.5% Whites

Sample of Student Organizations (For Entire List, see Student Life)
- African-American Alliance
- Audubon Club
- Fencers Club
- Thespian Drama Club
- Jazz Ensemble
- PreMed Society
- Social Justice Alliance
- Whitmore Gazette
- Young Feminists

Athletics
- Baseball
- Basketball
- Crew
- Football
- Golf
- Volleyball
- Hockey
- Soccer
- Softball
- Tennis

For additional information, please see appropriate web pages.
Appendix F

Manipulation of Independent Variable:
Neutral Campus Environment
Welcome to Whitmore
Type of College: Private, Liberal Arts, Residential, Coeducational

Degrees Offered: Bachelor of Arts, Bachelor of Social Work, Bachelor of Science

Size of Campus: 135 acres, 45 buildings, 14 dormitories, 7 Greek Houses

Enrollment: 3000 full-time students

Gender: 49% males; 51% females

Geographic Representation: 35% Michigan; 61% from rest of country; 4% from foreign countries.

Faculty: 125 full-time, 25 adjunct; 90% hold doctoral degrees

Gender: 68% males; 32% females

Sample of Student Organizations (For Entire List, see Student Life)
- Audubon Club
- Fencers Club
- Thespian Drama Club
- Jazz Ensemble
- PreMed Society
- Social Justice Alliance
- Whitmore Gazette
- Young Feminists

Athletics
- Baseball
- Basketball
- Crew
- Football
- Golf
- Hockey
- Soccer
- Softball
- Tennis
- Volleyball

For additional information, please see appropriate web pages.

WELCOME TO WHITMORE | BRIEF PROFILE
Appendix G

Manipulation of Independent Variable:
Favorable Campus Environment
Welcome to Whitmore

initiatives that have led it to be a leader in developing a multicultural campus reflective of our global society.

Look us over. Admittedly, the website is no substitute for a personal visit, but it will give you a good idea of why Whitmore ranks among the best. If, after reviewing our website, you want additional information or would like to arrange a visit to the campus, please contact the Admissions Office. Of course, if you know Whitmore is a place you'd like to be, we welcome your application.

* Barron's Guide to Colleges & Universities
  U. S. News & World Report

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Brief Profile

Welcome to Whitmore

Founded: 1863

Type of College: Private, Liberal Arts, Residential, Coeducational

Degrees Offered: Bachelor of Arts, Bachelor of Social Work, Bachelor of Science

Size of Campus: 135 acres, 45 buildings, 14 dormitories, 7 Greek Houses, 1 Multicultural House, and 1 International House

Enrollment: 3000 full-time students

Gender: 49% males; 51% females

Race/Ethnicity: 14% African-Americans, 9% Latinos, 3% Asian-Americans, 70% Whites, 4% Internationals

Geographic Representation: 35% Michigan; 61% from rest of country; 4% from foreign countries

Faculty: 125 full-time, 25 adjunct; 90% hold doctoral degrees

Gender: 68% males; 32% females

Race/Ethnicity: 4% African-Americans, 1% Latinos, .5% Asian-Americans, 94.5% Whites

Sample of Student Organizations (For Entire List, see Student Life)

- African-American Alliance
- Audubon Club
- Black Students Medical Society
- Fencers Club
- Jubilee Gospel Choir
- Thespian Drama Club
- Jazz Ensemble
- Latinos Association
- NAACP
- Onyx
- PreMed Society
- Social Justice Alliance
- Whitmore Gazette
- Young Feminists

Athletics

- Baseball
- Basketball
- Crew
- Football
- Golf
- Hockey
- Soccer
- Softball
- Tennis
- Volleyball

For additional information, please see appropriate web pages.
Appendix H

Campus Climate Survey Code Book
<table>
<thead>
<tr>
<th>Column #</th>
<th>Variable Name</th>
<th>Variable Label</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Race</td>
<td></td>
<td>1 = African-American</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Asian-American</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 = Latino</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 = American Indian</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>5 = White</td>
</tr>
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<td></td>
<td></td>
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<td>Gender</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>2 = male</td>
</tr>
<tr>
<td>3</td>
<td>HS GPA</td>
<td>High School GPA</td>
<td>1 = Less than 2.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = 2.00-2.39</td>
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<td>3 = 2.40-2.69</td>
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<td>4 = 2.70-2.99</td>
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<td>5 = 3.00-3.39</td>
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<td>6 = 3.40 - 3.69</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>7 = 3.70 - 3.99</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 = 4.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 = Don’t know</td>
</tr>
<tr>
<td>4</td>
<td>HS Rank</td>
<td>High School Rank</td>
<td>1 = Bottom Half</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Top Half</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 = Top Third</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 = Top Fourth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 = Top Fifth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 = Top 15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7 = Top 5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 = Don’t know</td>
</tr>
<tr>
<td>5</td>
<td>Yr in Sch</td>
<td>Year in School</td>
<td>1 = High School Senior</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = College Freshman</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 = College Sophomore</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 = College Junior</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 = College Senior</td>
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<table>
<thead>
<tr>
<th>Column #</th>
<th>Variable Name</th>
<th>Variable Label</th>
<th>Variable Value</th>
</tr>
</thead>
</table>
| 6        | College Board | College Board Tests | 1 = Have taken test  
|          |               |                 | 2 = Have not taken test |
| 7        | ACT           | Act Score       | 1 = Less than 11  
|          |               |                 | 2 = 11-15  
|          |               |                 | 3 = 16-20  
|          |               |                 | 4 = 21-25  
|          |               |                 | 5 = 26-30  
|          |               |                 | 6 = 31-36  |
| 8 - 9    | SAT1          | SAT1 score      | 1 = Less than 500  
|          |               | (Verbal + Math) | 2 = 500-510  
|          |               |                 | 3 = 520-580  
|          |               |                 | 4 = 590-650  
|          |               |                 | 5 = 660-700  
|          |               |                 | 6 = 710-750  
|          |               |                 | 7 = 760-800  
|          |               |                 | 8 = 810-850  
|          |               |                 | 9 = 860-890  
|          |               |                 | 10 = 900-930 
|          |               |                 | 11 = 940-970 
|          |               |                 | 12 = 980-1010 
|          |               |                 | 13 = 1020-1050 
|          |               |                 | 14 = 1060-1080 
|          |               |                 | 15 = 1090-1120 
|          |               |                 | 16 = 1130-1160 
|          |               |                 | 17 = 1170-1200 
|          |               |                 | 18 = 1210-1230 
|          |               |                 | 19 = 1240-1270 
|          |               |                 | 20 = 1280-1310 
|          |               |                 | 21 = 1320-1350 
|          |               |                 | 22 = 1360-1400 
|          |               |                 | 23 = 1410-1450 
|          |               |                 | 24 = 1460-1500 
|          |               |                 | 25 = 1510-1550 
|          |               |                 | 26 = 1560-1590 
|          |               |                 | 27 = 1600  |

10        | RCF           | Racial Composition of Best Friends | Record actual number  
|          |               |                              | (Note: measure of intergroup contact—higher number may work against integration into PWCU for minorities)
<table>
<thead>
<tr>
<th>Column #</th>
<th>Variable Name</th>
<th>Variable Label</th>
<th>Variable Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 – 22</td>
<td>RCS-A</td>
<td>Racial Composition of School/College - Actual Scores</td>
<td>Record actual % for each race</td>
</tr>
<tr>
<td></td>
<td>- African American</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- American Indian</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Asian American</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Latino</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- White</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 23      | RCS-P           | Racial Composition of School-Percentage | 1 = 75+ % white  
|         |                |                  | 2 = 50-75% white  
|         |                |                  | 3 = 25-49% white  
|         |                |                  | 4 = 25- % white   |
| 24      | CollPlan        | Plan to Attend College | 1 = yes  
|         |                |                  | 2 = no          |
| 25      | PWCU            | College Racial Composition | 0 = neither is a PWCU  
|         |                |                  | 1 = one is a PWCU  
|         |                |                  | 2 = both are PWCUs|
| 26      | AcS-C           | Academic Self-Concept (measure of self-confidence) | 1 = poorer grades  
|         |                |                  | 2 = do as well    
|         |                |                  | 3 = better grades |
| 27      | MomEd           | Mother's Educational Attainment | 1 = less than high school  
|         |                |                  | 2 = some high school  
|         |                |                  | 3 = HS graduate    
|         |                |                  | 4 = some college    
|         |                |                  | 5 = Bachelor's Degree 
|         |                |                  | 6 = Master's       
<p>|         |                |                  | 7 = Professional / Doctorate |</p>
<table>
<thead>
<tr>
<th>Column #</th>
<th>Variable Name</th>
<th>Variable Label</th>
<th>Variable Value</th>
</tr>
</thead>
</table>
|         |               | Father's Educational Attainment | 1 = less than high school  
| 28      | DadEd         | Father's Educational Attainment | 2 = some high school  
|         |               |                              | 3 = HS graduate  
|         |               |                              | 4 = some college  
|         |               |                              | 5 = Bachelor’s Degree  
|         |               |                              | 6 = Master’s Degree  
|         |               |                              | 7 = Professional / Doctorate  
| 29      | DadJob        | Father’s Occupation | 1 = Service  
|         |               |                              | 2 = Labor  
|         |               |                              | 3 = Clerical  
|         |               |                              | 4 = White Collar  
|         |               |                              | 5 = Professional  
| 30      | MomJob        | Mother’s Occupation | 1 = Service  
|         |               |                              | 2 = Labor  
|         |               |                              | 3 = Clerical  
|         |               |                              | 4 = White Collar  
|         |               |                              | 5 = Professional  
| 31-52   | Extent to which student would consider factor to determine anticipated social comfort | 1 = definitely consider  
|         |               |                              | 7 = definitely not consider  
| 31      | FinanAid      | Financial Aid for Minorities | Record actual  
| 32      | ATT           | Attractiveness of Campus | Record actual #  
| 33      | DIS           | Distance from Home | Record actual #  
| 34      | RaceStu       | Racial Composition of Student Body | Record actual #  
| 35      | XtraCur       | Extra-Curricular Program | Record actual #  
| 36      | EthOrg        | Ethnic Student Organizations | Record actual #  
| 37      | QualFdSv      | Quality of Food Services | Record actual #  

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<table>
<thead>
<tr>
<th>Column #</th>
<th>Variable Name</th>
<th>Variable Label</th>
<th>Variable Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>QualFac</td>
<td>Quality of Campus Facilities</td>
<td>Record actual #</td>
</tr>
<tr>
<td>39</td>
<td>RaceStaf</td>
<td>Racial Composition of Staff</td>
<td>Record actual #</td>
</tr>
<tr>
<td>40</td>
<td>LibSize</td>
<td>Size of Library</td>
<td>Record actual #</td>
</tr>
<tr>
<td>41</td>
<td>Locat</td>
<td>Location</td>
<td>Record actual #</td>
</tr>
<tr>
<td>42</td>
<td>Recruit</td>
<td>Efforts to Recruit Minorities</td>
<td>Record actual #</td>
</tr>
<tr>
<td>43</td>
<td>Prestige</td>
<td>Prestige of University</td>
<td>Record actual #</td>
</tr>
<tr>
<td>44</td>
<td>RaceFac</td>
<td>Racial Composition of Faculty</td>
<td>Record actual #</td>
</tr>
<tr>
<td>45</td>
<td>RepFac</td>
<td>Reputation of Faculty</td>
<td>Record actual #</td>
</tr>
<tr>
<td>46</td>
<td>EthStudy</td>
<td>Availability of Ethnic Studies Courses</td>
<td>Record actual #</td>
</tr>
<tr>
<td>47</td>
<td>RaceCab</td>
<td>Racial Composition of President's Cabinet</td>
<td>Record actual #</td>
</tr>
<tr>
<td>48</td>
<td>AcProg</td>
<td>Strength of Academic Program in Area of Interest</td>
<td>Record actual #</td>
</tr>
<tr>
<td>49</td>
<td>Cost</td>
<td>Total Cost to Attend</td>
<td>Record actual #</td>
</tr>
<tr>
<td>50</td>
<td>MinFac</td>
<td>Opportunities for Contact with Minority Faculty</td>
<td>Record actual #</td>
</tr>
<tr>
<td>51</td>
<td>Internet</td>
<td>Internet Access</td>
<td>Record actual #</td>
</tr>
<tr>
<td>52</td>
<td>QualAth</td>
<td>Quality of Athletic Programs</td>
<td>Record actual #</td>
</tr>
</tbody>
</table>
Appendix I

Institutional Perceptions Code Book
### Institutional Perceptions Code Book

<table>
<thead>
<tr>
<th>Column #</th>
<th>Variable Name</th>
<th>Variable Label</th>
<th>Variable Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 4</td>
<td>ID</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>IV</td>
<td>Favorableness of Campus Environment (Experimental Condition)</td>
<td>1 = Favorable 2 = Unfavorable 3 = Neutral/Non Diagnostic</td>
</tr>
<tr>
<td>6 - 7</td>
<td>Age</td>
<td>Record actual number</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Gender</td>
<td>1 = Male 2 = Female</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Year</td>
<td>Year in College 1 = Freshman 2 = Sophomore 3 = Junior 4 = Senior 5 = Graduate Student</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Race</td>
<td>1 = African-American 2 = Alaskan Native 3 = American Indian 4 = Asian American 5 = Caucasian 6 = Hispanic 7 = Multi-Racial 8 = Pacific Islander 9 = Other</td>
<td></td>
</tr>
<tr>
<td>Column #</td>
<td>Variable Name</td>
<td>Variable Label</td>
<td>Value</td>
</tr>
<tr>
<td>----------</td>
<td>---------------</td>
<td>----------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>11</td>
<td>MomEd</td>
<td>Educational Attainment of Mother</td>
<td>1 = Less than High School, 2 = Some High School, 3 = High School Graduate, 4 = Some College, 5 = Bachelor's Degree, 6 = Master's Degree, 7 = Professional/Doctorate Degree</td>
</tr>
<tr>
<td>12</td>
<td>DadED</td>
<td>Educational Attainment of Dad</td>
<td>(cf. Col. 11)</td>
</tr>
<tr>
<td>13</td>
<td>RaceFr</td>
<td>Friends of Same Race as Respondent</td>
<td>Record actual number</td>
</tr>
<tr>
<td>14</td>
<td>HSGPA</td>
<td>High School Grade Point Average</td>
<td>1 = Less than 2.0, 2 = 2.00-2.39, 3 = 2.40-2.69, 4 = 2.70-2.99, 5 = 3.00-3.39, 6 = 3.40-3.69, 7 = 3.70-3.99, 8 = 4.00, 9 = Don’t Know</td>
</tr>
<tr>
<td>15</td>
<td>ACT</td>
<td>Take ACT?</td>
<td>1 = Yes, 2 = No</td>
</tr>
<tr>
<td>Column #</td>
<td>Variable Name</td>
<td>Variable Label</td>
<td>Variable Value</td>
</tr>
<tr>
<td>----------</td>
<td>---------------</td>
<td>------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>16-17</td>
<td>ACTSc</td>
<td>ACT Score</td>
<td>1 = Less than 11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = 12-14</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 = 15-17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 = 18-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 = 21-23</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 = 24-26</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7 = 27-29</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 = 30-32</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 = 33-35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10 = 36</td>
</tr>
<tr>
<td>18</td>
<td>WhContact</td>
<td>Nature of Contact with Whites</td>
<td>1 = mostly negative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = equally positive and negative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 = mostly positive</td>
</tr>
<tr>
<td>19</td>
<td>BiContact</td>
<td>Nature of Contact with Blacks</td>
<td>1 = mostly negative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = equally positive and negative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 = mostly positive</td>
</tr>
<tr>
<td>20-23</td>
<td>SemGPA</td>
<td>GPA after one semester</td>
<td>Record actual number. If range</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>is given, compute mean of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>end-points.</td>
</tr>
<tr>
<td>24-27</td>
<td>YearGPA</td>
<td>GPA after one year</td>
<td>Record actual number. If range</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>is given, compute mean of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>end-points.</td>
</tr>
<tr>
<td>Column #</td>
<td>Variable Name</td>
<td>Variable Label</td>
<td>Variable Value</td>
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<tr>
<td>----------</td>
<td>---------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>28</td>
<td>VALUED</td>
<td>Feel Valued</td>
<td>Record Actual Number*</td>
</tr>
<tr>
<td>29</td>
<td>GenProve</td>
<td>“Prove” abilities to get same level of respect as opposite sex</td>
<td>Reverse Score</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 = 7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 = 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 = 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 = 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 = 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7 = 1</td>
</tr>
<tr>
<td>30</td>
<td>INVOLVED</td>
<td>Involved in at least one organization</td>
<td>Record actual number</td>
</tr>
<tr>
<td>31</td>
<td>BELONG</td>
<td>Feel as if I belong</td>
<td>Record actual number</td>
</tr>
<tr>
<td>32</td>
<td>COMFORT</td>
<td>Feel comfortable</td>
<td>Record actual number</td>
</tr>
<tr>
<td>33</td>
<td>FACRELAT</td>
<td>Difficult to develop close relationships with faculty members</td>
<td>Reverse Score</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(See instructions for Column 23)</td>
</tr>
<tr>
<td>34</td>
<td>SEEKHELP</td>
<td>Go to professor for help if doing poorly in class</td>
<td>Record actual number</td>
</tr>
<tr>
<td>35</td>
<td>CHANGE</td>
<td>Change to fit in at this school</td>
<td>Reverse Score</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(See Instructions for Col. 23)</td>
</tr>
<tr>
<td>36</td>
<td>ACPOTENT</td>
<td>Could reach my full academic potential</td>
<td>Record actual number</td>
</tr>
<tr>
<td>Column #</td>
<td>Variable Name</td>
<td>Variable Label</td>
<td>Variable Value</td>
</tr>
<tr>
<td>----------</td>
<td>---------------</td>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>37</td>
<td>CAMPUSACT</td>
<td>Activities on campus reflect my interest</td>
<td>Record actual number</td>
</tr>
<tr>
<td>38</td>
<td>ISOLATED</td>
<td>Feel socially isolated</td>
<td>Reverse Score (See Instructions for Col. 23)</td>
</tr>
<tr>
<td>39</td>
<td>RaceProve</td>
<td>&quot;Prove&quot; my abilities receive same respect as students of different race</td>
<td>Reverse Score (See Instructions for Col. 23)</td>
</tr>
<tr>
<td>40</td>
<td>ASKQUEST</td>
<td>Feel free to ask questions in class</td>
<td>Record actual number</td>
</tr>
<tr>
<td>41</td>
<td>FRIENDS</td>
<td>Difficult to meet and make friends</td>
<td>Reverse Score (See Instructions for Col. 23)</td>
</tr>
<tr>
<td>42</td>
<td>HAPPY</td>
<td>Very happy as student</td>
<td>Record actual number</td>
</tr>
<tr>
<td>43</td>
<td>DoWell</td>
<td>Do very well academically</td>
<td>Record actual number</td>
</tr>
<tr>
<td>44</td>
<td>RECWHIT</td>
<td>Would not recommend Whitmore to friends</td>
<td>Reverse Score (See Instructions for Col. 23)</td>
</tr>
</tbody>
</table>

*For items 28-44, higher scores reflect a more favorable campus environment.*
Appendix J

Protocol Clearance from the Human Subjects
Institutional Review Board
for Study One
Date: 8 September 2000

To: Thomas Ford, Principal Investigator
Brenda King, Student Investigator for dissertation.

From: Sylvia Culp, Chair

Re: HSIRB Project Number: 00-08-15

This letter will serve as confirmation that your research project entitled "Campus Climate Survey" has been approved under the expedited category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the revisions (09/06/00) submitted for your protocol. In particular, for high school students ages 16 to 17, you should use the revised survey that shows ranges for high school, grade point average, high school rank, and A.C.T. or S.A.T.I. scores. You should use this survey for the subject population because you are only obtaining passive permission from their parents. If you wish you can use the unrevised survey for subjects who are over 18.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: 8 September 2001
Date: 20 September 2000

To: Thomas Ford, Principal Investigator
   Brenda King, Student Investigator for dissertation

From: Sylvia Culp, Chair

Re: Changes to HSIRB Project Number: 00-08-15

This letter will serve as confirmation that the changes to your research project “Campus Climate Survey” requested in your memo dated 19 September 2000 have been approved by the Human Subjects Institutional Review Board.

The conditions and the duration of this approval are specified in the Policies of Western Michigan University.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: 8 September 2000
Date: 25 September 2000

To: Thomas Ford, Principal Investigator
    Brenda King, Student Investigator for dissertation

From: Sylvia Culp, Chair

Re: Changes to HSERB Project Number: 00-08-15

This letter will serve as confirmation that the changes to your research project “Campus Climate Survey” requested in your memo dated 25 September 2000 have been approved by the Human Subjects Institutional Review Board.

The conditions and the duration of this approval are specified in the Policies of Western Michigan University.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSERB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: 8 September 2000
Date: 13 October 2000

To: Thomas Ford, Principal Investigator  
    Brenda King, Student Investigator for dissertation

From: Sylvia Culp, Chair

Re: Changes to HSIRB Project Number: 00-08-15

This letter will serve as confirmation that the changes to your research project "Campus Climate Survey" requested in your memo dated 10 October 2000 have been approved by the Human Subjects Institutional Review Board.

The conditions and the duration of this approval are specified in the Policies of Western Michigan University.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: 8 September 2001
Appendix K

Grand Rapids Public Schools
Research, Evaluation, Assessment & Planning
Permission to Conduct Research
Date: July 19, 2000

Title of the Research: Campus Environment Survey

Researcher(s) Name: Brenda King, Doctoral Student

Researcher(s) Affiliation: Western Michigan University

Starting Date: August, 2000 Ending Date: September, 2000

Purpose of the Study: Identify campus characteristics that students use to make decisions about quality of life—comfort level—they would experience on a given campus.

Benefit(s) of the Research to the School/Community: Assist parents and counselors as they provide guidance to young people who are selecting colleges; provides useful information to colleges seeking to prove optimal campus environment (given its importance for retention).

Type of Data to be Collected (attach instrument(s) if developed): Survey - Questionnaire

You do not need to secure active parent consent.

Population: College Bound Seniors at Central, Creston, Ottawa & Union High Schools and U.P.

Assistance Needed: Counselors administer test or provide access to college-bound seniors for on-site administration of survey.

1. The researcher shall obtain the written approval of the Director of Research, Evaluation, Assessment & Planning Services for the research design, all research instruments, and all pieces of correspondence to school personnel or parents regarding this research prior to their actual use in the study.
2. The researcher shall provide a report of findings for the data obtained from the Grand Rapids Public Schools in an acceptable format to the Director of Research, Evaluation, Assessment & Planning Services.

3. No data, articles, or reports based on this study shall be released by the researcher to parties internal or external to the Grand Rapids Public Schools without the prior written approval of the Director of Research, Evaluation, Assessment & Planning Services.

4. All activities of the researcher shall be in accordance with all federal, state, and local school district guidelines for handling student data and protection of the rights and privacy of parents and students.

5. The terms of this agreement may not be modified except by mutual written agreement between Research, Evaluation, Assessment & Planning Services and the investigator. Notwithstanding the foregoing, this agreement may be terminated by either party upon thirty (30) days written notice to the other party at the addresses listed below.

RESEARCHER

Brenda T. King
(Name)

3071 Bonita Dr., SE
(Address)

Grand Rapids, MI 49508-1471
(City, State, Zip Code)

(Brand T. King)
(Signature of Researcher)

Western Michigan University
(Institutional Affiliation)

July 19, 2000
(Date)

Grand Rapids Public Schools
Research, Evaluation, Assessment & Planning Services

1331 Franklin, SE, P O Box 117

Grand Rapids, MI 49501-0117

Jan Bazar
(Director)
(Signature)

8/25/00
(Date)
Appendix L

Protocol Clearance from the Human Subjects
Institutional Review Board
for Study Two
Date: March 13, 2001

To: Thomas Ford, Principal Investigator
Brenda King, Student Investigator for dissertation

From: Michael S. Pritchard, Interim Chair

Re: HSIRB Project Number 01-02-22

This letter will serve as confirmation that your research project entitled "Institutional Perceptions" has been approved under the exempt category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: March 13, 2002
Date: May 4, 2001

To: Thomas Ford, Principal Investigator
    Brenda King, Student Investigator for dissertation

From: Michael S. Pritchard, Interim Chair

Re: Changes to HSIRB Project Number: 01-02-22

This letter will serve as confirmation that the changes to your research project "Institutional Perceptions" requested in your memo dated May 3, 2000 have been approved by the Human Subjects Institutional Review Board.

The conditions and the duration of this approval are specified in the Policies of Western Michigan University.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: March 13, 2002
Appendix M

Consent Form for Study Two
Title of Research: Institutional Perceptions
Principal Investigator: Dr. Thomas Ford
Student Investigator: Brenda King

You are invited to participate in a research project entitled “Institutional Perceptions” designed to determine how institutional characteristics affect students’ quality of life. This project is being conducted by Dr. Thomas Ford and Brenda King from Western Michigan University, Department of Sociology. This research is being conducted as part of the dissertation requirements for Brenda King.

You will be asked to examine some university web pages and imagine that you are a student at that university. You will then be asked to complete a survey that consists of 15 items designed to measure how you’d feel as a student. You will simply be asked to indicate the extent to which you’d agree with each statement if you were a student of that university. You will also be asked to provide some basic information about yourself. Your replies will be completely anonymous, so do not put your name anywhere on the form. You may choose to not answer any question and simply leave it blank. If you choose to not participate in this survey, you may return the blank survey or you may discard it in the box provided.

Returning the survey indicates your consent for the use of the responses you supply. There is no extra credit for participating and no penalty for choosing not to participate. If you have any questions, you may contact Professor Ford (616-387-5280), Brenda King (616-247-7669), the Human Subjects Institutional Review Board (616-387-8393) or the Vice President for Research (616-387-8298).

Thank you for your participation.

(Date) (Last 4 digits, Social Security Number)

Note: This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Subjects should not complete this document if the corner does not show a stamped date and signature.
Appendix N

Permission to Conduct Research
PERMISSION TO CONDUCT RESEARCH

I, ________________________________, have discussed the research proposal
( italiana Student Organization Leader – please print)

for Project Number 00-08-15, Campus Climate Survey, with Brenda King and hereby

grant permission for her to administer the survey to students in my organization.

______________________________
(Signature of Student Organization Leader)

______________________________ (Name of Student Organization – please print) ____________________________ (Date)

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Journal of Blacks in Higher Education (Summer 1998). Why family income differences don't explain the racial gap in SAT scores, 6-8.


Kidwell, C. S. (1994). Higher education issues in Native American Communities. In M. J. Justiz, R. Wilson, & L. G. Björk (Eds.), *Minorities in higher education* (pp. 239-257).


