Institutional Commitment to Policies and Practices that Support Racial and Ethnic Diversity in the Post-Affirmative Action Era: Examining Sense of Belonging and Diversity Engagement

by

Angela Mosi Locks

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Doctoral Committee:

Associate Professor Deborah Faye Carter, Chair
Emeritus Professor Patricia Y. Gurin
Professor Edward P. St. John
Professor Sylvia Hurtado, University of California, Los Angeles

DEDICATION

This dissertation is dedicated to my ancestors: Marshall Locks, Mary Johnson Locks, Julia Nelson, Mary Emma Nelson Locks, Alton W. Locks, Sr., Albert James Locks, Richard Thompson, II, Alex Jack, Octavia Edwards Jack, Sylvia Alfred Jack Louis, Hillary Jack, Herman Louis, and Anna Belle Jack Bellard; Mr. Carlton Jack, Sr., the patriarch of my mother's family, and Ms. Ethel Locks Harris, the matriarch of my father's family; and the next generation of my family, Ms. LeAsia Amandi Locks.

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ABSTRACT

This dissertation covers the following three topics: (1) how public and private institutions vary in their commitment to racial and ethnic diversity; (2) the connection between sense of belonging in college and interactions with diverse peers; and (3) participation in co-curricular diversity programs for African American, Latino, and White students. Using structural equation modeling (SEM) techniques, institutional commitment to policies and practices that support racial and ethnic diversity were characterized and relationships between students' interactions with diverse others and college student outcomes were tested. This study found that public and private institutions differ in their articulation of commitment to racial and ethnic diversity and interacting with diverse others in college has implications for the transition to college and students' engagement with cocurricular diversity programs during the first two years of college. These investigations have implications for three areas of significance for higher education practitioners: (1) administrators engaged in setting race-conscious policies in a dynamic sociopolitical environment; (2) academic/student affairs professionals concerned with the transition to college; and (3) student affairs professionals dedicated to facilitating meaningful cross-racial interactions on college campuses.

CHAPTER I

INTRODUCTION

At the beginning of the 21st century, the issue of ethnic and racial diversity has become a central and contentious focus in higher education in the United States. The progress elite, predominantly white institutions (PWIs) and public flagships have made toward diversity and inclusion over the years is being threatened by recent challenges to affirmative action, race conscious programs, and successful state ballot initiatives restricting the use of race in selection procedures by higher education institutions.

Before the civil rights movement, many campuses in the U.S. had a history of institutionalized discrimination and exclusionary practices. In the decades after the civil rights movement, U.S. higher education saw an increase in the enrollment of people of color, but it became clear that minority students needed more than access if they were to graduate from PWIs. Those institutions needed to adjust to their more diverse student bodies (Peterson, Blackburn, Gamson, Arce, Davenport, & Mingle, 1978). Predominantly white colleges and universities initiated, and have maintained, a number of programs and initiatives, some with roots going back to the 1960s and 1970s and the post-Civil Rights movement era (Anderson, 2002). One example is the development of ethnic studies programs (Bataille, Carranza, & Lisa, 1996; LaBelle & Ward, 1996; Mohanty, 1993) that

began in response to student protests and demands for an inclusive and representative curriculum.

Equal opportunity programs sprouted up across a number of campuses in the early 1970s and represented the first attempts by institutions to correct past practices of exclusion (Anderson, 2002; Peterson, et al., 1978). Such programs evolved to focus on the recruitment and retention of historically underrepresented students of color into PWIs, often by addressing remedial academic concerns resulting from lack of quality high school educational opportunities and providing support services for students (Anderson, 2002; Gumport & Bastedo, 2001; Shaw, 1997). More recently, institutions have supported programs designed to help students increase their multicultural competencies as a means of easing racial tensions in educational institutions and acquire skills they will need as leaders in diverse societies (Banks, 1993; Banks et al., 2005). Programs and initiatives that have diversity as a focus have become the latest attempt by PWI's to adjust their climates, which are otherwise often unwelcoming for students of color.

Historically, higher education has sought to shape the U.S. citizenry and prepare their graduates to contribute to society (Bowen, 1977; Guttman, 1987). Additionally, colleges and universities have been expected to produce competent graduates to fulfill workforce needs (Committee on Economic Development, 2005; Engberg, 2007). Public institutions must meet a unique set of standards set by state governing boards, as well as standards and expectations from the public. This is particularly true for state flagship institutions where admission is a highly sought after prize and admissions practices are often contested.

As U.S. society continues to experience demographic shifts, a more racially and ethnically diverse set of individuals attend college. Colleges and universities must determine how they will meet the needs of students of color in hostile legal environments that threaten traditional mechanisms for recruiting and retaining students of color. They also must continue to improve campus climates and outcomes for students of color. Existing and emerging research has the potential to inform institutional policies and practices.

Educational researchers have repeatedly identified factors, such as the campus environment, institutional type, and organizational characteristics that affect outcomes for college students (Bean 1980, 1983; Braxton & Mundy, 2001; Pascarella & Terenzini, 1991, 2005). Organizational characteristics such as communication, fairness in application of academic rules and grading, and involving students in decision-making are related to retention (Berger & Braxton, 1998). Research indicates that students of color may be more sensitive than their White counterparts to aspects of their college experiences (Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999; Hurtado, 1992; Hurtado, Milem, Clayton-Pederson, & Allen, 1998, 1999; Steele & Aronson, 1995). This may be because students of color possess worldviews different from those of their institutions or their fellow White students. Because of the historical legacy of structural racism on college campuses, conflicts between the worldviews of students of color and the norms of some campuses may be invisible (Bensimon, 2004; Chesler, Lewis, & Crowfoot, 2005; Feagin, 2002; Hurtado et al., 1999). Ideological tensions may exist when an institution's culture and values are not in accord with those of some of its students. Hurtado and colleagues (1999) cite an example:

> …the idea of competition (evidenced by grading on a curve and assigning individual rather than group-oriented projects) serves to perpetuate an elitist view of higher education that causes colleges and universities to focus on the acquisition of resources and engage in other behaviors that serve to further their academic 'reputation' (p. 41).

Previous research has demonstrated the importance of campus climate and concerted institutional efforts toward improving the experiences and outcomes for students of color (Cabrera et al., 1999; Hurtado, 1992; Hurtado et al. 1998, 1999). Providing mechanisms for academic, social, and financial support is a key strategy institutions can employ to demonstrate their commitment to people of color, thus improving the campus climate for racial and ethnic diversity (Freeman, 1997; Green, 2001; Hurtado, et al. 1998, 1999). Given the continuing significance of race in education and college experiences, due in part to structural and interpersonal racism, students of color often navigate their institutions, professors, and peers in ways that are distinct from those of White students. For students of color, race is a salient factor during their undergraduate years and as such must be central to examining their college experiences and the institutional actions and climates that promote positive outcomes in college. Thus, the campus climate for racial and ethnic diversity merits attention in understanding specific experiences that lead to success in college for historically underrepresented students of color.

In recent years, research on the campus climate has expanded to include empirical investigations centered on how diversity affects college students. Gurin, Dey, Hurtado, and Gurin (2002) used theoretical frameworks grounded in psychology to frame their explanation of the process by which college students from racially and socially homogenous pre-college environments interact with diverse others in ways that challenge their notions of their diverse peers. Gurin et al. (2002), Chang (1996), and others (e.g.

Nelson-Laird, Engberg, & Hurtado, 2005; Saenz, Ngai, Hurtado, 2007) have documented the educational value of diversity for both cognitive and social outcomes. Twenty-first century college student diversity outcomes is a term used to describe the skills necessary for college graduates to function in an increasingly diverse U.S. society and an interdependent global community, including being able to interact with diverse others and democratic and civil engagement abilities (Gurin et al., 2002, 2003; Chang, Astin, and Kim, 2004; Chang, Denson, Saenz, & Misa; 2006; Hurtado, 2003a, 2003b). Not fully explored in the literature are the relationships between institutional policies and practices that support racial and ethnic diversity and twenty-first century college student diversity outcomes. Further insight into the educative value of diversity is needed, given predictions about the changing demographics in higher education and the increasing restrictions on the use of race by colleges and universities. This is no small task, as research on campus climate and the educational value of diversity must be context specific, including but not limited to institutional type, state, and region. For example, private institutions have a degree of freedom public institution do not. As such, assessment of issues related to racial and ethnic diversity needs to account for these and other types of differences.

Campus Climate Conceptual Frameworks

Only a few models offer a comprehensive explanation of the campus climate for racial and ethnic diversity. Hurtado, Milem, Clayton-Pederson, and Allen (1999) proposed a four-dimensional framework to explain the context in which campuses could create and support diverse learning environments. The four dimensions are: (a) Historical Legacy of Inclusion/Exclusion, (b) Compositional Diversity, (c) Psychological, and (d)

Behavioral. Each of these dimensions shapes the campus climate for race and ethnicity in distinct ways.

More recently, Milem, Chang, and Antonio (2005) expanded the Hurtado et al. model to include an organizational dimension designed to capture the institutional policies and practices that support racial and ethnic diversity. Understanding the campus climate for racial and ethnic diversity has implications for student learning and a host of additional college outcomes. The organizational structures and practices of an institution dictate whether it creates and maintains an environment where students benefit from diversity. These institutional practices include the inclusion of diversity in the curriculum, tenure policies, organizational decision-making policies, and budget allocations. For example, instituting a diversity course as a graduation requirement is a specific curricular initiative that fosters a racially and ethnically inclusive environment. Cocurricular initiatives may include living-learning programs or an intergroup relations program (IGR). Institutions who value students' tolerance of diverse others and want students to work cooperatively with diverse others and develop empathy may be more likely to articulate a commitment to giving undergraduates the opportunity to develop democratic skills during college. Decisions to support IGR programs, culturally themed residence halls, and other diversity-centered cocurricular activities demonstrate this commitment in concrete ways.

The aforementioned institutional policies and practices shape the psychological climate of a campus and have the potential to affect student behaviors in and out of the classroom (Hurtado et al., 1999; Milem et al., 2005). Given the challenges associated with responding to histories of exclusion and the dynamic sociopolitical context outlined

by Hurtado et al. (1999) institutional action becomes even more salient. If institutions do not have clearly defined policies and practices to support racial and ethnic diversity on their campuses, they will likely be unsuccessful. The organizational/structural dimension emphasized by Milem et al. (2005) is a missing piece of the puzzle of why PWIs continue to struggle with how they respond to, manage, and value the presence of racially and ethically diverse students on their campuses. More importantly, this focus puts a spotlight on institutional accountability for the campus climate for racial and ethnic diversity in a distinct way. Institutions are responsible for the quality and context of their undergraduate academic programs. This responsibility begins with recruiting a diverse group of students and extends to the curriculum, hiring diverse faculty and staff and fostering cross-racial interactions in formal and informal settings. The documented educational value of a diverse student body makes colleges and universities increasingly responsible when a diverse student body is not maintained. Despite the importance of understanding the connection between diversity-related institutional actions and student outcomes, there is little research on this topic in higher education.

Purpose and Scope

This introductory chapter examines the broader higher education context for diversity from two vantage points. The first examines the institutional context for racial and ethnic diversity in higher education, with a specific focus on characterizing and understanding differences between public and private institutions. The other vantage point explores the effects of diversity on students of color. This three-part study aims to provide a better understanding of the processes and outcomes associated with the higher education experiences of students of color as captured in the Hurtado et al. (1999) and

Milem et al. (2005) models. Of particular interest are the interactions undergraduates have with diverse others and the institutional context for diversity. Each chapter has a specific focus on racial and ethnic diversity, including institutional policies and practices, the transition to college, and student engagement in diversity programs. All data were derived from the Diverse Democracy Project[1] undertaken in 2000 and 2001 under the direction of Sylvia Hurtado, supported by a Field Initiated Studies Program grant from the Office of Educational Research at the U.S. Department of Education. The Diverse Democracy Project had a particular focus on public institutions (with data taken from ten public flagship campuses); some that were constrained by race-neutral policies, at the time the study was completed in 2000-2001. Because the Diverse Democracy Project focused on student behaviors, attitudes, and values in addition to institutional values, policies and practices, it represents an empirical investigation of the dimensions in the Hurtado et al. (1999) and Milem et al. (2005) models.

In Chapter II, I use data from the Survey of Academic Officers, administered in the spring of 2001, to examine the institutional commitment to policies and practices that support racial and ethnic diversity at public and private higher education institutions. Specifically, I report the characterizations public and private institutions articulate about their enactment of policies and practices in support of racial and ethnic diversity. As Chapter II examines the institutional context for racial/ethnic diversity at four-year institutions and explores differences between public and private institutions, it provides a vantage point from which to understand the results of the subsequent two student-focused studies in Chapters III and IV that focus solely on students enrolled at public campuses.

[1] The survey instruments used in this study to generate data are provided at the end of this document.

In Chapters III and IV, I use data derived from two surveys administered to students at the beginning of their first year of college (fall of 2000) and the end of their second year (spring of 2002) to assess student outcomes. In Chapter III, three colleagues and I examine the relationships between meaningful interactions with diverse others and students' sense of belonging in college, a critical transition to college outcome.[2] In Chapter IV, meaningful interactions with diverse peers continue to be explored, but the focus is on students' participation in cocurricular diversity programs. African American, Latina/o, and White students' interactions with diverse others are investigated as they relate to participation in short- and long-term cocurricular diversity programs. The common theme across all three studies (Chapters II-IV) is how and why diversity matters in the context of higher education, specifically at elite public universities. Specific questions considered are:

- How do four-year colleges and universities characterize their organizational structures (core leadership policies/practices), institutional priorities for increasing compositional diversity, values in undergraduate education (learning environment), and cocurricular activities (actual programs) as they relate to racial/ethnic diversity? How do such characterizations differ for public and private institutions?
- What pre-college and college experiences with diverse peers affect sense of belonging for White students and students of color in the second year of college?
- What pre-college and college experiences with diverse peers affect participation in cocurricular diversity programs for African American, Latina/o, and White students in the second year of college?

The purpose of my dissertation is to explore these questions using structural equation modeling (SEM) techniques to test specific hypotheses about: (1) how to best

[2] This chapter is featured in Locks, A. M., Hurtado, S., Bowman, N. A., & Oseguera, L. (2008). Extending notions of campus climate and diversity to students' transition to college. *Review of Higher Education, 31*(3), 257-285, hereafter referred to as Chapter III.

characterize the organizational structure, values, and priorities for increasing compositional diversity and cocurricular activities; (2) interactions with diverse others and a sense of belonging in college; and (3) student participation in cocurricular diversity programs. My aim is to provide insight into any differences between how public and private higher education institutions enact their commitment to policies and practices that support racial and ethnic diversity. Additionally, I investigate how African American and Latina/o students interact with diverse peers across racial and ethnic groups relative to their White counterparts, as well as how these interactions may produce differential outcomes for these groups of students.

Institutional Commitment to Policies and Practices that Support Diversity

Having a racially and ethnically diverse campus is important, as an institution without such diversity is limited in its ability to produce graduates prepared to serve and work in an increasingly multicultural, interdependent world. Many colleges and universities use affirmative action policies as a strategy to create diverse student bodies and faculties. Other strategies to support a positive campus climate for racial and ethnic diversity include programs and infrastructures that support racially and ethnically diverse community members and initiatives that promote cross-racial interactions and learning (Smith, 1989). The higher education literature focuses primarily on students and faculty, and in rare instances staff, when examining institutions from an organizational perspective.

Since people of color began entering PWIs in greater numbers in the 1970s, colleges and universities have developed a wide variety of programming and initiatives designed to alleviate racial tensions and improve the campus climate for racial and ethnic

diversity. Central administrative practices can lead to increased structural diversity, compositional diversity, and cocurricular activities and programs. These include intergroup relations programs, multicultural centers, and living learning programs that facilitate cross-racial interactions.

I have adapted Hurtado, Milem, Clayton-Pederson, and Allen's (1999) framework for diverse learning environments, and Milem, Chang and Antonio's (2005) conceptualization of the campus climate for diversity to frame institutional commitment to racial and ethnic diversity for the study chronicled in Chapter II. I explore institutional commitment to racial and ethnic diversity by asking: *How do four-year colleges and universities characterize their organizational structures, institutional priorities for increasing compositional diversity, values in undergraduate education and cocurricular activities related to racial/ethnic diversity?* Using quantitative methods, I explore the validity of institutional commitment to diversity measures by control status (institution type, public or private). Specifically, I use exploratory factor analyses and structural equation modeling techniques to perform confirmatory factor analyses on factors related to institutional commitment to racial and ethnic diversity and compare these analyses for public and private institutions.

The concepts in Milem, Chang, and Antonio (2005) are based on years of higher education research and practice, but these concepts have not been empirically tested with regard to institutional policies and practices. Chapter II takes the first step of testing the validity of their concepts. This study has potential implications for chief academic officers and the growing number of diversity officers on college campuses responsible for maintaining racially and ethnically diverse student bodies. Chapter II provides a much-

needed empirical test of what higher education scholars posit as important to creating inclusive campus environments where all students thrive academically and socially. If reliable measures of the campus climate and institutional commitment to racial and ethnic diversity are established, scholars and practitioners will be better positioned to increase accountability for the experiences of students of color. Studies that focus specifically on institutions are not widely published in higher education, yet such studies are needed as calls for accountability grow and resources for higher education become more constrained.

Experiences of Students of Color with Diversity and the Transition to College

In the past decade, a number of scholars have explored the behavioral dimension of the Milem et al. (1999) model through examinations of the impact of diverse campus climates and civic engagement on student learning and post-graduate outcomes. This research has implications for campus initiatives and programs, but also has policy implications as evidenced by the role this particular line of social science research played in the 2003 Supreme Court Cases on affirmative action. Gurin, Hurtado, Dey, and Gurin (2002) found that in additional to informal interactional and classroom diversity, structural diversity (i.e., increasing numbers of people of color) had a positive relationship to students' learning outcomes. Other studies have found similar support for the influence of interactions with diverse peers on a variety of college student academic outcomes such as the development of critical thinking skills (Antonio, Chang, Kahuta, Kenny, Levin, & Milem, 2004; Nelson-Laird, Engberg, & Hurtado, 2005). Additionally, Antonio (2004) found ethnic differences on intellectual self-confidence (positive for

students of color and negative for White students) and the effects of diversity within the peer group.

Other researchers have begun to help us understand why diversity makes a difference for all students, but in distinct ways across racial and ethnic groups. For example, in his exploration of friendship groups among college students, Antonio (2004) relied on the work of Feldman and Newcomb, (1969), Weidman's theory of socialization (1989), and the racial diversity work of Chang (1996). Antonio found that having confident friends affected students of color, yet friends with high degree aspirations had the greatest effect on White students. Chang, Astin, and Kim (2004) used the University of Michigan's argument in the *Gratz v. Bollinger* and *Grutter v. Bollinger* cases regarding the educational value of diversity in examining the cross-racial interactions of college students. As with the Gurin et al. (2002) study, Chang and his colleagues found that while all students benefit from interacting with diverse peers, White students gained the greatest educational benefits. Chang and his colleagues recommended enrolling a greater number of students of color and creating more opportunities for students to interact with diverse others within the campus environment to ameliorate racial tensions.

Despite the growing body of literature on the effects of interactions with diverse peers, some noticeable gaps exist. African Americans and Latina/o students have consistently different outcomes compared to their White and Asian American counterparts in self-reports of the educative value of diversity in the classroom and on campus. The work of Gurin et al. (2002) is a prime illustration, as is the work of Chang, Astin, and Kim (2004). As mentioned earlier, interacting with diverse peers is beneficial for students, but African American and Latina/o students benefit to a lesser degree on

some measures. For example, Gurin et al. found that classroom diversity had a negative effect on African American students' self-assessments of their academic skills. Additionally, they found larger, positive effects of informal interactional diversity over classroom diversity on learning outcomes for all but Latina/o students. Gurin and colleagues acknowledge " … students of color [may] respond differently to opportunities for diversity experiences and [may] have distinct interaction patterns that affect different outcomes" (2002, p. 352). Little research is available that helps explicate these differential findings for African Americans and Latina/os compared to their White and Asian American counterparts (Chang, Astin, & Kim, 2004).

The purpose of the study reported in Chapter III is to explore the relationship between interactions with diverse peers and the transition to college, using factors related to the psychological climate and behavioral dimension of the Milem et al. (2005) model. Specifically, the direct and indirect relationships between interactions with diverse peers before and during the first year of college and a specific transition to college outcome—sense of belonging—are examined. The primary research question answered by this study is: *What pre-college and college experiences with diverse peers affect sense of belonging for White students and students of color in the second year of college?* This study represents an opportunity to examine the climate for students of color at PWIs with regard to their transition to the college environment and all students' experiences with diversity at PWIs. This information will be useful to student and academic affairs professionals as it connects student interactions and a student academic outcome.

Participation in Cocurricular Diversity Programs

Meaningful interactions with diverse peers go beyond students simply interacting with one another across racial and ethnic groups. These interactions must be substantive and meaningful if they are to mediate perceived racial tensions on campus and anxiety with diverse peers. Campuses have developed curricular and cocurricular initiatives designed to foster cross-racial interactions and the development of the aforementioned competencies. The question guiding the study in Chapter IV is: *What pre-college and college experiences with diverse peers affect participation in cocurricular diversity programs for African American, Latina/o, and White students in the second year of college?* The chapter presents group differences from SEM analyses of African American, Latina/o, and White students.

Summary

Specific college experiences affect the nature and quality of interactions students have with diverse others, as do their pre-college experiences. Both types of experiences deserve attention when considering how students' diversity engagement operates in the college context. If a relationship between interactions with diverse peers and participation in cocurricular diversity programs could be established, it would serve as further evidence in support of the educational benefits of campus diversity. Moreover, it would support institutional investment in creating meaningful opportunities for students to interact with diverse others through cocurricular diversity programs and initiatives and validate the time and resources campuses invest in such initiatives.

Previous studies have shown that a positive institutional climate for racial and ethnic diversity is critical to the success of historically underrepresented students of

color. The aforementioned research on diversity and student outcomes gives us more insight into how a racially and ethnically diverse campus climate improves the experiences of undergraduates. While the higher education literature shows growing amounts of data and theories on the impact of diverse college campus environments on students, less is known about: (a) the institutional context for diversity and (b) why differential outcomes exist for students of color compared to their White counterparts. Questions remain about specific connections between students' experiences with diverse others and key college student outcomes, such as the transition to college. I seek to fill this gap with this three-part study.

It is important to better understand how institutions characterize their commitment to racial and ethnic diversity because such commitments have implications for establishing institutional policies and practices that create more inclusive campus climates. Moreover, such policies may have implications for key outcomes that affect an institution's climate for racial and ethnic diversity, as demonstrated in the aforementioned literature. Given the findings of Gurin et al. (2002), Chang, Astin, and Kim (2004), Hurtado (2003), and Milem et al. (2005) regarding the relationship between interactions with diverse peers and learning outcomes, more should be understood about the institutional context for racial and ethnic diversity.

The goal of this dissertation is to better understand how public and private campuses vary in their commitments to diversity and understand why students of color, African American and Latina/o students in particular, have differential outcomes related to their interactions with diverse others in the college environment by examining data from ten public flagship campuses. Specifically, the purpose of this three-part study is to

characterize institutional commitment to policies and practices that support diversity and to explore relationships between interactions with diverse peers and sense of belonging and participation in cocurricular diversity programs for African American and Latina/o students. Responding to the aforementioned questions will provide insight into differences between public and private higher education institutions and their commitments to policies and practices that support racial and ethnic diversity. Chapter II reports the results for the institutional survey analyses, followed by work on sense of belonging (Chapter III) and cocurricular diversity programs (Chapter IV). I conclude with an overview of what the three studies indicate about the context for institutional commitment to diversity and how African American and Latina/o students are affected in unique ways by their diverse college environments.

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CHAPTER II

INSTITUTIONAL COMMITMENT TO POLICIES AND PRACTICES THAT SUPPORT RACIAL AND ETHNIC DIVERSITY

Introduction

Despite gains made in the enrollments of African American, Latina/o, and Native American students in higher education from the 1970s to the beginning of the twenty-first century, increasing and maintaining racial and ethnic diversity in higher education has once again become a challenge for U.S. college campuses. Predominantly white institutions (PWIs) continue to struggle with enrollment, retention, and inclusivity with regard to historically underrepresented persons of color. A hostile sociopolitical environment for addressing racial and ethnic disparities adds to the challenge of colleges and universities making ethnic and racial diversity an institutional priority. Public institutions in particular are constrained due to affirmative action ballot initiatives that disproportionately affected campuses in the public domain.

Since the 1970s, PWIs have struggled with increasing the presence of people of color on their campuses. In their groundbreaking study, Peterson, Blackburn, Gamson, Arce, Davenport, and Mingle (1978) recognized the importance of how PWIs responded to the increased presence of African Americans. They found great variability in campus case study responses regarding the centrality of race related initiatives (e.g., programs, policies, practices) to the day-to-day operations—some campuses took a reactive response and others a more proactive response to institutional transformation. In the

1980s, the era immediately following the *Bakke* decision on the inclusion of race in admissions, higher education research and praxis focused on further refinement of racial and ethnic diversity programs, many of which primarily targeted specific racial groups (Altbach, Lomotey, & Kyle, 1999).

A number of studies published in the 1990s examined the climate for racial and ethnic diversity in U.S. colleges and universities, responding in part to a number of incidents occurring on college campus where students of color were the targets of racially motivated hate crimes. Most recently, racial and ethnic diversity research has documented the educative value of diversity, highlighting the importance of the quality of cross-racial interactions that affect learning outcomes and the development of civic skills. This research has used social psychological theories to assess the impact of diversity on individuals, whether students, faculty, or staff. However, little quantitative research has examined institutions as the unit of analysis in campus climate research. I aim to fill this gap in the literature with this study.[1]

Background

Scholars apply numerous theories to organizational behavior in higher education research and praxis to explain how decisions are made in the context of colleges and universities. Reviews of theories and research relevant to organizational behavior in higher education cover topics as wide ranging as the relationship between society and government, adaptation and innovations, and planning and management (Peterson, 1974), as well as leadership, decision-making, and resource allocation (Dill, 1984).

Bolman and Deal (2003) used the following four frames to explain how organizations function: (a) symbolic, (b) structural, (c) human resource, and (d) political.

[1] Student outcomes are examined in Chapters III and IV.

From a symbolic framework perspective, campus organizational cultures would be stressed and histories of inclusion would be evaluated. Institutional leaders as well as constituents of faculty, staff, and students would give input about the congruity between real and perceived accessibility and inclusivity. A structural frame in decision-making processes would (a) have clear policies grounded in their rationale for undertaking initiatives to support racial and ethnic diversity, (b) focus on coordination of racial and ethnic initiatives, and (c) work towards establishing or maintaining an appropriate infrastructure to support such programs and initiatives. A human resource frame, which would call for the inclusion of program staff in decision-making processes, might yield a unique strategy for realizing institutional goals related to racial and ethnic diversity. From a political framework perspective, a great deal of ambiguity and conflict surround how institutions reach their goals regarding racial and ethnic diversity, due in large part to a dynamic and hostile sociopolitical climate for race-based initiatives. While the strategy to advance an evidence-based argument about the educative value of diversity used by the University of Michigan was successful, many campuses have limited resources from which to launch long, expensive legal battles. Despite these challenges, many campus leaders remain strong advocates of diversity.

A plethora of theories are applied to higher education and numerous frameworks designed to explicate organizational behavior in the higher education context; despite this wealth of knowledge, there is no commonly used conceptualization that links the organizational environment or climate of an institution with outcomes for students (Berger, 2000). Overarching frameworks exist to explain undergraduate student outcomes and organizational behavior separately, but a framework that closely links these areas of

higher education practice and study is lacking. There are a few models that offer organizational frameworks to explain the linkages between an institution's commitment to policies and practices that support racial and ethnic diversity and related student outcomes. One model by Richardson and Skinner (1990) hypothesized how institutions adapt to increased racial and ethnic diversity in the student body. Richardson and Skinner argued that the policy environment and institutional mission shape higher education organizational culture, which in turn affects institutional outcomes such as equity in enrollment and graduation rates. In their model of institutional adaptation to student diversity, legal context, funding priorities, access initiatives, and information and communication in the state policy environment are considered important. They posit that the policy environment and institutional mission dictate selectivity and lower expectations for diverse students, which lead to lower enrollments for students of color. Open access policies have the opposite effect. Ultimately, institutional actions such as setting clear goals and priorities, allocating resources, coordinating holistic student affairs practices, and involving faculty in initiatives can resolve tensions between quality and diversity. Additionally, Richardson and Skinner emphasize the sensitivity of institutions to the specific state policies in which the campus is situated, citing that some state policies call for the increased representation of students of color.

The *Elements Influencing the Climate for Racial/Ethnic Diversity* framework provided by Hurtado, Milem, Clayton-Pedersen, and Allen (1999) and more recently the *Campus Climate Framework* by Milem, Chang, and Antonio (2005) represent two of the more comprehensive conceptualizations of the campus climate for racial/ethnic diversity. (See Appendices 2.1 and 2.2 at the end of this chapter). Both frameworks account for the

governmental and political context and forces that influence higher education institutions, as well as the socio-historical context and forces that shape institutional policies for racial and ethnic diversity. Milem et al. (2005), using work completed by Milem, Dey, and White (2004), added an *Organizational/Structural Dimension* to the Hurtado, et al. (1999) framework. Specifically, they include the diversity of the curriculum, tenure policies, organizational decision-making policies and budget allocations and policies. They further change the language used to refer to the numbers of people of color on a campus from *Structural Diversity* to *Compositional Diversity*.

A new, more complex approach to diversity is necessary if U.S. higher education is to respond to changing demographics and to increased dependency on and globalization of economies and cultures. The need to respond to the current and future demands on higher education is underscored by Williams and Clowney's (2007) three models of organizational diversity in U.S. higher education: the Affirmative Action and Equity (1950s/1960s), multicultural (1960s/1970s) and Academic diversity (1990s/2000s) models. They note that each of these produced "incremental change," which will likely be inadequate in the twenty-first century.

Williams, Berger, and McClendon (2005), who propose an Inclusive Excellence Change Model designed to assess institutional change for diversity in a twenty-first context, emphasize that:

> …diversity is a key component of a comprehensive strategy for achieving institutional excellence—which includes, but is not limited to, the academic excellence of all students in attendance and concerted efforts to educate all students to succeed in a diverse society and equip them with sophisticated intercultural skills.

They argue that such an approach to diversity allows higher education institutions to stay relevant by positioning themselves to be responsive to Twenty-first century challenges.

Williams and Clowney (2007) suggest that a diversity approach should simultaneously address the following three rationales for diversity in higher education: educational value, business case, and social justice. Williams, Berger, and McClendon (2005) argue that institutions must use diversity to maintain and increase the relevancy of higher education as well to promote sustainable change. They base their conceptualization on Bensimon (2004), Hurtado, et al. (1999) and Smith and colleagues (1997). To evaluate institutional change with regard to diversity, they recommend the following four areas be evaluated: (a) access and equity, (b) diversity in formal and informal contexts, (c) campus climate, and (d) student learning and development. Further, they recommend that each area's objectives be developed along with goals and strategies. As part of the ability to assess institutional diversity change and excellence, they also call for measures to capture baselines and identify targets, which would then be used as a ratio to form an equity score in the assessment and evaluation of institutional change.

If the health of regional economies and the overall U.S. economy rest on a workforce with the skills and training to function and fully participate in a global, knowledge-based context, higher education administrators and practitioners have much to change about their campuses. Principal among these tasks is addressing and encouraging the inclusion of peoples and practices that reflect the reality of a racially and ethnically diverse U.S. population. Williams, Berger, and McClendon (2005) call for ways to assess an institution's ability to effect change, emphasizing the need for baseline indicators of success. Milem, Chang, and Antonio's (2005) campus climate framework includes many of these same areas for assessment using the Inclusive Excellence Scorecard and

therefore provide a way to begin to quantify baseline measures of an institutions' commitment to racial/ethnic diversity.

Chief Academic Officers, presidents, provosts and other central administrators, have key roles in establishing policies and supporting practices that cultivate a campus climate that is responsive to and inclusive of racial and ethnic diversity. Such individuals may encourage racial and ethnic diversity by aligning institutional values and commitments to diversity through budget allocations, instituting supportive programs, and structures that support diversity, oversight of Deans responsible for the curriculum, and rewarding campus community members for a commitment to diversity.

The growing number of Chief Diversity Officers on college campuses signals a new way for institutions to manage and respond to diversity related matters, and these Officers may have a permanent role in the post-affirmative action era. Williams and Wade-Golden (2007) suggest four defining characteristics of Chief Diversity Officers. They may serve as change agents, responsible for new diversity-related initiatives and, "develop diversity educational strategies for executives, faculty, staff and students" (p. 39). They also may be the 'point leaders on issues of diversity; such individuals may be situated in the institutions' human resources unit, responsible for serving the entire campus community. Lastly, Chief Diversity Officers may develop relationships across their campuses and units. Citing their previous work, the authors emphasize the effectiveness of such personnel rests on their "status, persuasions and symbols" (Williams & Wade-Golden, 2006, as cited in Williams & Wade-Golden, 2007, p.39). In summary, the growing number of Chief Diversity Officers may potentially act as the coordinators for campus initiatives, priorities, and policies reflected in Milem et al.'s

(2005) Organizational/Structural dimension. Additionally, at some colleges and universities, a Chief Diversity Officer may be responsible for creating infrastructures to support diversity.

Previous Research

The growing impetus to better understand how institutions manage, respond to, and benefit from racial/ethnic diversity is evidenced both by the growing number of diversity offices on campus and the plethora of research on racial/ethnic diversity in the higher education context that focuses specifically on students (Williams & Clowney, 2007). The growing body of research concerned with racial/ethnic diversity in higher education can be broadly categorized into the following three areas: students, faculty, and staff.

Student Focused Studies

There are documented differences between private and public institutions in how their students are affected by diversity. Recent research has shown that at private institutions a positive relationship between the quality of students' interactions with diverse peers and other student outcomes exists in the first year of college, as well as the senior year of college (Pike, Kuh, & Gonyea, 2007). They found that compositional diversity (e.g., the number of people of color) on a campus had a statistically significant positive indirect relationship to gains in understanding racially and ethnically diverse others. This indirect relationship, which was mediated by the amount of interaction with diverse others, held true for the first year of college and in the senior year of college. Flowers (2003) found that racial composition has an effect on African American

students' interactions with faculty, and that African American students at PWIs report fewer interactions with faculty.

The curricula at colleges and universities, largely faculty driven, provide campuses with ways to affect the climate for students (Hurtado et al.; Milem et al.). Colebeck (2002) found that at institutions where engineering faculty perceived support for their teaching, they were more likely to be attuned to the needs of underrepresented students of color. A number of studies examine the importance of the curricula to student outcomes. Terenzini, Cabrera, Colbeck, Bjorland, and Parente (2001) found diversity in the classroom positively related to student problem solving and ability to work in groups, even when controlling for other student attributes.

Faculty and Staff Focused Studies

Faculty play a key role in shaping the climate at their institutions, yet most research relevant to understanding the institutional context for diversity has been student focused; studies have focused on faculty only in rare cases. One such study found that faculty of color are more likely to be hired when institutions highlight diversity in the job description, have hiring programs to diversify the campus, and are often hired into or with an affiliation with an ethnic studies programs (Smith, Turner, Osei-Kofi, & Richards, 2004). In another study, Mayhew and Grunwald (2006) found faculty who perceive their campus to be more committed to inclusion are more likely to incorporate diversity into their courses.

Empirical investigations into the campus climate for racial and ethnic diversity that focus solely on staff are even rarer than those assessing faculty attitudes and behaviors. One of the few studies focused on staff found that social identity

characteristics are important factors in how staff view the climate for diversity, but so is the individual's own work environment (Mayhew, Grunwald, & Dey, 2006).

Institution Focused Studies

Despite increased calls for institutional accountability for student outcomes, there is little literature featuring institutions as the focal point of empirical investigations into racial and ethnic diversity, especially quantitative studies. Among studies published in a ten-year period, where a derivative of the word *race*, *ethnic*, or *diverse* appeared in the abstract, only seven had a campus or institution as the unit of analysis.[2] Of the seven articles, Meredith (2004) is the only one related to an outcome not directly focused on student outcomes or behaviors. (The others focused on outcomes such as college students' engagement, academic development, critical thinking, cognitive outcomes, social and personal competence, and leaving college.) Meredith examined the effects of the *U.S. News and World Report* annual college rankings on institutions' admissions practices and found that an improvement in ranking lowered publics institutions' acceptance rates by 4% while private institutions had a decrease of 1%.

Although Richardson and Skinner's (1990) findings are nearly twenty years old, their case study of ten campuses, which indicated a complex picture of institutional responses to increases in racial and ethnic diversity in the early 1990s, has particular relevance for this study. For example, several of the less selective campuses had high enrollment rates but low graduation rates for students of color; the converse was true for selective institutions. Many studies have found this same positive relationship between selectively and graduation rates. A more recent quantitative investigation, completed by

[2] Based on a review of 51 articles from the *Review of Higher Education* and 69 articles from *Research in Higher Education* published between January 1998 and June 2008.

Rowley, Hurtado, and Ponjuan (2005) argued that, "Diversity…should be conceptualized and studied as a politically and socially defined construct with inherently complex implications at numerous levels within higher education institutions as complex organizations" (p. 5). Rowley et al. (2005) examined institutional diversity and found a positive relationship between central administrative/organizational structures and the presence of racially and ethnically diverse faculty. They also found that institutions that focus on prestige had more faculty of color. Based on these findings, they argue that diversity and excellence are closely linked. Their study supports the Milem, Chang, and Antonio (2005) assertions about the influence of institutional core values and practices on the climate for racial and ethnic diversity.

Campus self-studies occur regularly but are rarely published (Hurtado, Carter, & Kardia, 1998). There are a few notable exceptions. For example, Bauman, Bustillos, Bensimon, Brown, and Bartee (2005) examined how organizations can engage in self-study to improve outcomes that are more equitable for students across racial and ethnic groups; the result of their study was the development of a diversity scorecard. The goal of the diversity scorecard is to give institutions a tool to evaluate their goals and progress relative to eliminating educational inequities across racial and ethnic groups. The four orientations towards diversity that inform the Bauman et al. scorecard are: (a) access, (b) retention, (c) excellence, and (d) institutional receptivity (i.e., "goals and measures of institutional support that have been found to be influential in the creation of affirming campus environments for historically underrepresented students," p. 22). It is institutional receptivity and commitment to racial and ethnic diversity that is the focus of this study.

Conceptual Framework

The policies and practices that support racial and ethnic diversity range from admissions to hiring practices such as affirmative action, to institutionalizing retention programs, to creating multicultural centers. Other policies and practices designed to support racial and ethnic diversity include a degree requirement of completing at least one course on diversity, living-learning communities, and intergroup relationship programs. Combined, the Hurtado et al. (1999) and Milem et al. (2005) frameworks capture the complexities of the institutional context, in that campuses are attempting to address racial and ethnic diversity in higher education and meet Williams, Berger and McClendon's (2005) calls for assessment and evaluation of institutional actions to improve the climate for diversity. I have adapted the Hurtado and Milem frameworks to help explore institutional commitment to policies and practices that support racial and ethnic diversity (see Figure 2.1). My adaptation, shown in Figure 2.1, suggests a way to evaluate an institution's commitment or level of support for practices and policies that foster elements of a positive institutional climate for racial and ethnic diversity.

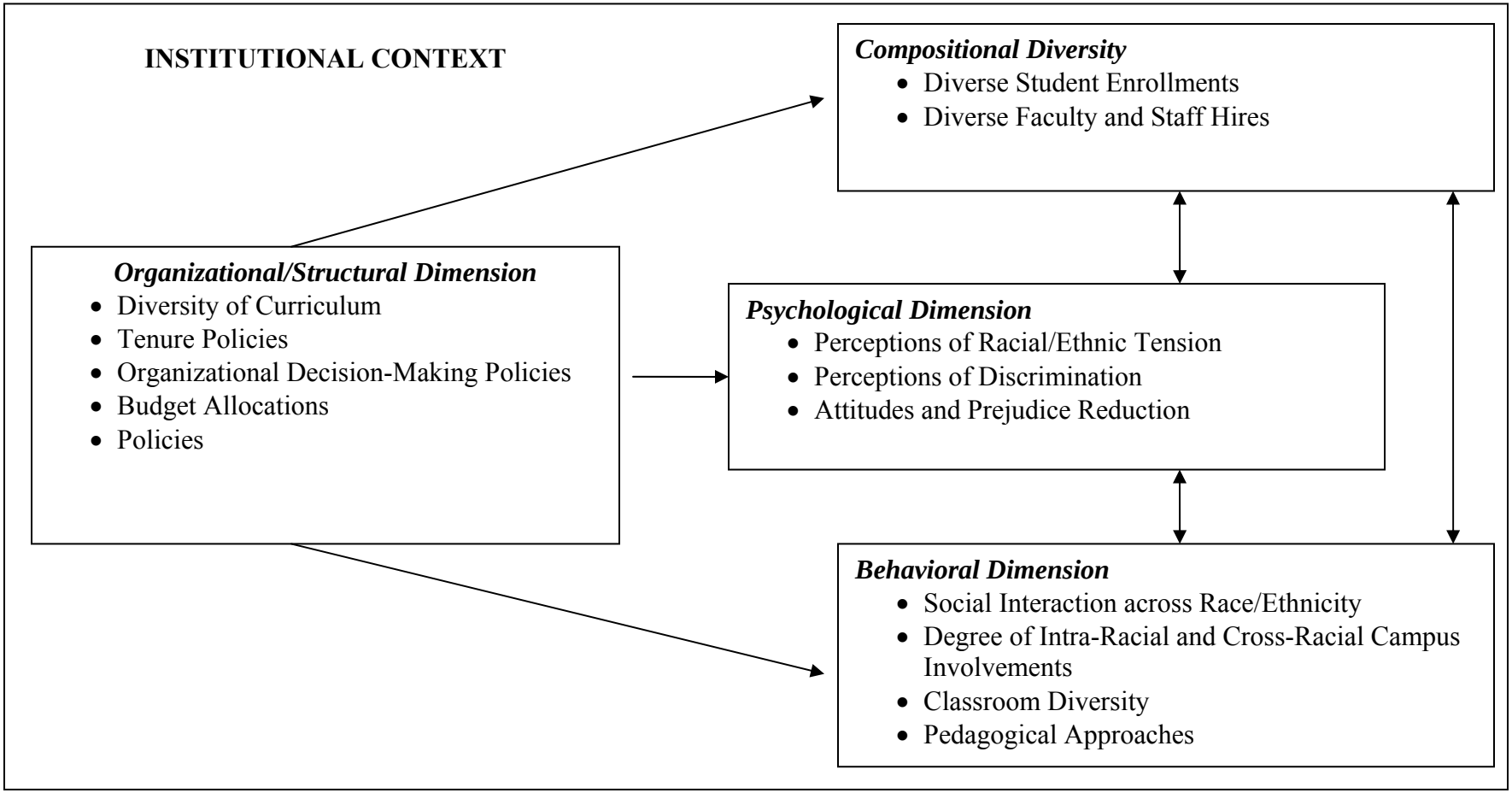
Institutions create, support, and enact policies to increase racial/ethnic diversity in higher education institutions. Milem, Chang, and Antonio (2005) provide a framework to evaluate institutional commitment to racial/ethnic diversity. Their five-dimensional conceptual framework includes the following areas: (a) Historical Legacy of Inclusion/Exclusion, (b) Compositional Diversity, (c) Psychological, (d) Behavioral; as mentioned earlier, Milem et al. (2005) added an Organizational/Structural Dimension (see Appendix 2.2). This new dimension signals the importance of institutional policies and practices in valuing racial/ethnic diversity in higher education. What institutions

articulate as their values, along with their policies and actions, are key to realizing student-related outcomes in the psychological and behavioral dimensions. For example, a campus whose mission espouses a commitment to diversity might have explicit programs designed to increase the compositional diversity of their faculty and students. Williams, Berger, and McClendon (2005) emphasized that institutions must deliberately institute policies and practices if they are to create a campus climate that becomes more inclusive.

Although not depicted in Figure 2.1, the *historical dimension* is important because many predominantly white institutions have exclusionary legacies they must confront as they enact their commitments to racial/ethnic diversity and inclusion. Historically, institutions purposely excluded students based on gender, race/ethnicity, and religious affiliation. The history of how institutions transformed exclusionary policies and practices to inclusive ones illuminates challenges in how institutions manage race/ethnicity in the current context for higher education. In fact, institutional commitment to racial/ethnic diversity in many cases may be a preemptive remedy for past discriminatory policies and practices. As institutions began to increase the numbers of racially/ethnically diverse students on their campuses, many students of color had only a token presence on their campuses and were often isolated among their predominantly white peers (Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999; Davis et al., 2004). The notion of critical mass began to influence institutional policies in the late 1980s and early 1990s as some institutions began to align their commitments to racial/ethnic diversity with admission policies and practices. Increasing critical mass was a useful strategy (Hurtado et al. 1999; Williams & Clowney, 2007).

Figure 2.1

Conceptual Model Assessing Institutional Commitment to Policies and Practices that Support Racial/Ethnic Diversity



Adapted from Hurtado, Milem, Clayton-Pederson, and Allen (1999) and Milem, Chang, and Antonio (2005).

Compositional Diversity refers to the number of racially and ethnically diverse faculty, staff, and students at an institution (Milem et al., 2005). Because of the significance the presence others of color has on other outcomes related to racial and ethic diversity in the higher education context, it has its own dimension in Hurtado et al. (1999) and Milem et al.'s models (2005). I have retained this aspect in my conceptual framework because it represents a key aspect of how institutions articulate their commitments and priorities to racial and ethnic diversity. Moreover, without structural diversity, other diversity goals will likely be impossible to meet (Gurin et al., 2002; Smith, 1989; Williams, Berger, & McClendon, 2005).

Critical mass is a synonym for Compositional Diversity and is important to campuses for two key reasons. First, marginalized students do better in college environments where they are not treated as token representatives of their social identity groups. Second, opportunities for students to appreciate and gain an understanding of within-group diversity and heterogeneity are dependent upon the number of people of color in an environment. Justice Clarence Thomas, in his dissenting opinion in *Grutter,* suggested that elite institutions of higher education could solve the challenge of inclusivity and the enrollment of racially and ethnically diverse students using race-neutral means if they relaxed admission standards. In the *Grutter* assenting opinion, O'Conner noted the importance of critical mass in creating a diverse student body and encouraging student to more fully learn and be engaged in their college environments. Campuses struggle to achieve racial/ethnic diversity to a level of critical mass in a post-affirmative action sociopolitical environment.

Setting aside psychological and behavioral dimensions for a moment, the *Organizational/Structural Dimension* includes aspects of the curriculum, promotion and tenure practices, decision–making processes, and resource allocation. These five areas may include specific actions such as institutionalizing diversity as a campus priority, developing curricular support for racial and ethnic diversity, and promoting and rewarding diversity activities. Some campuses have intergroup relations programs and hold workshops and discussions about racial and ethnic diversity. Additionally, institutional commitment to racial and ethnic diversity is displayed through undergraduate curricula. The decisions made by core leadership and faculty effect both the psychological climate as well as student behaviors.

The *Psychological Dimension* of previous campus climate models included perceptions of racial tension, perceptions of discrimination and attitudes, and prejudice reduction (Hurtado et al., 1999; Milem et al., 2005). Many campus programs that have addressed this psychological dimension rely on having sufficient compositional diversity. Moreover, campus priorities such as fostering a climate where differences of opinion are openly discussed, developing an appreciation for a multicultural society, and creating a diverse learning environment can have positive effects on the psychological climate.

Milem et al. (2005) include pedagogical approaches with the social interaction across race/ethnicity, campus involvement and diversity, and classroom diversity in their *Behavioral Dimension*. Campus involvement is specifically framed as the degree of intra-racial and cross-racial campus involvement. Given that this study examines institutional policies sand practices, it does not directly address specific student behaviors. However, an application of the elements of this behavioral dimension to an institution's priorities

and programming is reflected in specific institutional values. The cocurricular programs and initiatives on a campus can serve as an indicator of an institution's willingness to create a campus climate that fosters cross-racial interactions outside the classroom. For example, valuing undergraduate development of democratic skills by the time students graduate and supporting cocurricular diversity programs like race awareness workshops and intergroup dialogue programs represent a commitment to racial and ethnic diversity.

My application of Milem, Chang, and Antonio's (2005) Campus Climate Framework suggests how to assess institutional commitment to policies and practices that support racial/ethnic diversity. Specifically, I argue for the influence of organizational structures and central administrative leadership as a key component along with the other dimensions. I explore the organizational/ structural dimension, as well as the institutional policies and practices which mediate negative aspects of the psychological dimension (e.g., racial tension, discrimination, prejudices) and support aspects of the behavioral dimension (e.g., inclusive curricula, cross-racial contact). Before relationships between the dimensions of a campus climate for racial/ethnic diversity may be empirically explored using quantitative methods, reliable measures must be available. It is the characterization of institutions' policies and practices, represented by perspectives of campus leaders, which is the focus of this study.

Purpose of Study and Research Questions

The following research questions guide this study:

1. How do four-year colleges and universities characterize their organizational structures (core leadership policies/practices), institutional priorities for increasing compositional diversity, values in undergraduate education (learning environment), and cocurricular activities (actual programs) related to racial/ethnic diversity?

2. How do such characterizations differ for public and private institutions?

My primary interests lie in understanding how institutions characterize their commitment to policies and practices that support ethnic and racial diversity. I am specifically interested in the institutional values, practices, and actions that support racial and ethnic diversity. Using quantitative measures, I examine measures of institutional commitment to diversity by control status (public or private institution). The following section describes my methodological and analytical approach followed by the results.

Methods

Data

The sample for this study was derived from the Diverse Democracy Project. The broader project included qualitative and quantitative methods examining students' preparedness for participation in a Diverse Democracy and institutions' commitment to diversity and civic related activities. Specifically, data from the Diverse Democracy survey of chief academic officers were used to examine institutional commitment to policies and practices that support ethnic and racial diversity. The Institutional Survey on Civic Engagement and Diversity included items exploring institutional strategies, values, and priorities concerning students, civic engagement, and diversity awareness (Appendix A). In the spring of 2001, 1440 chief academic officers at four-year colleges and universities in all 50 states in the U.S. received the survey. Institutions were selected based on geographic diversity across the U.S., relatively large undergraduate populations, and representation with regard to type of degree offered (doctoral, masters, baccalaureate). After a follow-up with non-respondents four weeks after the initial survey

was distributed, the final response rate was 55% with 744 individuals returning the survey on behalf of their institutions.

Sample

The 744 respondents included a wide cross section of Chief Academic Officers at U.S. colleges and universities; 42.7% were administrators at public institutions and 52.3% were at private institutions. Of the 318 public institutions, 32.7% were doctoral granting institutions, 52.8% were master's granting institutions, and 14.5% offered only baccalaureate degrees. Of the 426 private institutions returning the survey, 10.6% were doctoral granting institutions, 34.3% granted master's degrees, and 55.2% offered only baccalaureate degrees.

Missing Data

All items used to create the factors used in this study had less than 3.5% missing data. Because of this low level of missing data, it was acceptable to impute missing data using the Expectation-Maximization (EM) algorithm in EQS Structural Equation Modeling (SEM) Software, version 6.1, henceforward referred to at EQS (Dumpster, Laird, & Rubin, 1977 cited in Allison, 2002). The EM algorithm imputed data based on a series of iterations that create maximum likelihood estimates for parameters; this data imputation method is particularly appropriate where a full data matrix is necessary to complete analyses on latent factors (Benter, 2006; Bentler & Wu, 2002). Two steps are taken as the EM algorithm process converges to the ML estimates; first, an expectation step and second, a maximization step (Bentler, 2006).

Groups

Analyses were done on the whole group of Chief Academic Officers then done by institution type, public or private. For the purposes of comparing public and private campuses, institutions were dummy coded in SPSS 14.0 (0 = private; 1 = public) and EQS (1 = public; 2 = private).

Analyses

In the conceptual framework of this paper, I presented features of institutional priorities and programs hypothesized to affect institutional commitment to racial and ethnic diversity. The goal of these analyses was to examine the institutional qualities cited as essential for institutional change with regard to diversity. Further, this study tested for group invariance between public and private institutions on these measures. The results section includes a summary of descriptive analyses of these factors based on institutional type and summarizes results from the measurement models.

I conducted analyses in two stages because of the lack of empirical testing of the Milem, Chang, and Antonio (2005) conceptualization of the campus climate. This study attempts to operationalize their framework by adapting their concepts to assess institutional commitment to racial/ethnic diversity. Stage 1 included exploratory factor analyses to assess the validity of concepts as captured by the Institutional Survey on Civic Engagement and Diversity (See Appendix A). In Stage 2, I started with confirmative factory analyses using SEM techniques to build and test a measurement model, using that model to test for group invariance between public and private institutions.

A covariance structure was used using EQS, and the measurement model was found to represent a first order confirmatory factor analyses (Byrne, 2006). Building and testing a measurement model allowed for the validation of scale items from the survey as a representation of institutional commitment to racial/ethnic diversity as expressed in Milem, Chang, and Antonio's (2005) campus climate model. The benefits of using SEM techniques to complete confirmatory factor analyses in comparison to traditional confirmatory analyses are the availability of fit indices (Byrne, 2006; Kline, 1998). Fit indices serve as barometers for how well factors represent specific phenomena of interest and are explained in detail in Stage 2 of these analyses.

Stage 1: Exploratory Factor Analyses

My first analytic step was to use principal axis factors to complete exploratory analyses (EFA) on items of interest from the survey. I elected to complete an EFA because it allowed me to begin exploring whether items on the Institutional Survey on Civic Engagement and Diversity had validity (Pedhauzer & Pedhauzer-Schmelkin, 1991). Moreover, the EFA allowed me to structure factors representative of Milem, Chang, and Antonio's (2005) dimensions with a logical approach to completing factor analyses of items from the instrument. The oblique direct oblimin option in SPSS 14.0 was used with smaller sets of conceptually and theoretically grouped variables as part of the EFA. The oblique rotation was chosen to allow factors to correlate, as this approach has been found to be beneficial when using SEM techniques to detect group differences (Loehlin, 2004; Kline, 1998). I specified various delta settings with an oblique direct oblimin rotation for additional factor analyses utilizing SPSS. A change in delta settings at -0.4, 0.5, and 0.8 all produced the same results, with no differences in the Kaiser-Meyer-Olkin measures of

sampling adequacy or Bartlett's test of sphericity, so factors were analyzed from this point forward with a delta of 0 (the SPSS 14.0 default). Next, I created a more refined set of factors based on interpretations of the factor analyses. The first stage of factor analyses was exploratory in nature and did not provide fit indices or focus on differences between public and private institutions.

Core leadership Policies and Practices.

Two factors captured the organizational/structure dimension as demonstrated by policies and practices enacted by core leadership on campuses. The factor Core Leadership Support for Diversity had three items. Bartlett's test of sphericity ($X^2(_3)$ = 525.99)[3] and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy were adequate (.64). This factor explained 51.73% of the variance.[4] Because the item regarding the incorporation of diversity into strategic planning documents had a lower loading (.551), all possible two-item factor variations from these three items were explored. None had adequate KMO values, so I elected to use the three-item factor.

The second factor that conceptually represents organizational/structure captured institutional actions that promote diversity. Bartlett's test of sphericity ($X^2(_6)$ = 806.01) and the KMO measure of sampling adequacy were adequate (.79). This factor explained 48.94% of the variance and loadings ranged from .669 to .738 (see Table 2.2).

Six items on the survey were related to promoting and rewarding diversity as key practices, two of which asked specifically about evaluating and assessing the climate for diversity. For this initial 6-tiem factor, Bartlett's test of sphericity was $X^2(_{21})$ = 1518.193, and the KMO measure of sampling adequacy was .88; the factor explained 42.30% of the

[3] The significance level for all Bartlett's tests of sphericity for all factor analyses reported here were $p \leq .000$
[4] Eigen values for this and all other factors reported in the study were above 1.0.

variance; loadings ranged from .501 to .680. The item assessing institutional efforts in civic engagement and service learning was eliminated because of a low loading (.50). This resulted in a Bartlett's test of sphericity of $X^2(_{21}) = 1763.532$, the KMO measure of sampling adequacy was .86, and 44.21% of the variance was explained; loadings ranged from .587 to .752. I further refined this factor by eliminating another item—promotes research in the area of civic engagement. The KMO was .87 and Bartlett's was $X^2(_{15}) = 1402.573$, with 46.09% of the variance explained. Upon examination, the two items with the lowest loadings in the six-item factor were also conceptually incongruent with the majority of items in the factor as they asked about assessment and evaluation of the campus climate (.658) and diversity goals (.660). A final four-item factor was used in the analyses from this point forward (Table 2.2); the KMO was .79, and Bartlett's was $X^2(_6) = 806.007$, with 48.94% of the variance explained.

Institutional Priorities for Increasing Compositional Diversity

As mentioned earlier, Rowley, Hurtado, and Ponjuan (2005) used a five-item factor that included survey items about compositional diversity and creating a diverse learning environment as institutional priorities. Institutional commitment to increasing the numbers of students and faculty of color is one of the four main areas of interest for this study and thus a two-item factor was created; the KMO was .79, and Bartlett's was $X^2(_1) = 337.198$, with 60.42% of the variance explained.

Values in Undergraduate Curriculum

The institutional values that foster a campus inclusive of diversity can positively influence the psychological dimension of the campus climate (Milem, Chang, Antonio, 2005). Three items explored represented this: (a) creating a diverse learning environment;

(b) fostering democratic skill development as part of the undergraduate experiences; and (c) institutional curricular initiatives that support racial/ethnic diversity. For these three items in the Creating a diverse learning environment factor (noted in Table 2.2). Bartlett's test of sphericity ($X^2(_3)$ = 695.546, and the KMO measure of sampling adequacy were adequate (.66) and this factor explained 56.49% of the variance and loadings ranged from .559 to 842.

There were six items in the first analysis related to Institutional values placed on the development of democratic skills as part of the undergraduate experience. In addition to the items in Table 2.2, the following three items were included in the initial factor: (a) "Opportunities for students to interact with people across racial, ethnic, cultural, or social differences;" (b) "Respect and civility towards others with different beliefs, backgrounds and lifestyles within social contexts;" and (c) "Ability to identity common interests and value among different social groups." These items were measured on the same four-point Likert scale (1 = "Not important" to 4 = "Essential") as questions about the degree of importance of the items listed in Table 2.2. This resulted in a Bartlett's test of sphericity was $X^2(_{15})$ = 2030.770, and the KMO measure of sampling adequacy was .87 and where 53.62% was explained for this revised factor; loadings ranged from .626 to 828. After eliminating "Opportunities for students to interact with people across racial, ethnic, cultural, or social difference," which had the lowest loading of .626, the revised 5-item factor the Bartlett's test of sphericity was $X^2(_{10})$ = 1690.856, the KMO was .85 and where 56.66% was explained for this revised factor and the loadings ranged from .610 to .841. I eliminated "Respect and civility towards others with different beliefs, backgrounds and lifestyles within social contexts" and "Ability to identity common interests and value

among different social groups" because of low loadings and conceptual distinctions from the remaining three items. The Bartlett's test of sphericity was $X^2(_3) = 926.799$, the KMO was .72 and where 54.70% was explained for this final factor and the loadings ranged from .743 to .869 and is the factor included in Table 2.2

The survey asked institutions about their curricular initiatives and undergraduate degree requirements (e.g., living learning programs, requiring community based experiences, etc.) on a four-point Likert scale (1 = "Strongly disagree" to 4 = "Strongly agree"). For the initial 6-item factor, Bartlett's test of sphericity was ($X^2(_{15}) = 628.549$) and the KMO measure of sampling adequacy were adequate (.77) and this factor explained 28.00% of the variance with loadings ranging from .454 to 591. The item with the lowest loading, "Giving academic credit to students for public service activities," was removed from the factor and the final 5-tiem factor in Table 2.2 had a Bartlett's test of sphericity ($X^2(_{10}) = 481.700$), an adequate KMO (.77) with 30.91% of the variance explained with a range of loadings from .461 to 614.

Cocurricular Activities

Eight items on the survey asked chief academic officers about support on their campuses for various cocurricular initiatives, measured with a seven-point Likert scale (1 = "Does not support" to 7 = "Strongly supports"). The initial factor that included all eight items had a Bartlett's test of sphericity ($X^2(_{28}) = 2484.399$, and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy were adequate (.88) and this factor explained 46.92% of the variance. Two items had extremely low loadings; volunteer opportunities for students to assist communities (.184) and a multi-ethnic food fest for the campus community (.300) and were withdrawn from the factor one at a time. This revised 6-item

factor had a Bartlett's test of sphericity ($X^2_{(15)}$ = 2118.942, p<001 with a KMO that was adequate at .86 and explained 54.7% of the variance. In this 6-item factor, one item had a lower loading "Centers and institutes related to diversity and/or multiculturalism" (.647) and because it did not require students' active participation, it was dropped from factor. The final 5-item factor in Table 2.2 had had a Bartlett's test of sphericity ($X^2_{(10)}$ = 1753.966), an adequate KMO (.83) with 57.25% of the variance explained with a range of loadings from .648 to 860.

Stage 2 Measurement Model (Confirmatory Factor Analyses)

A primary objective of this chapter was to test for group invariance between public and private campuses of a measurement model examining institutional commitment to racial/ethnic diversity. Thus, after completing the exploratory analyses, I used SEM techniques to build a measurement model to assess the soundness of applying Milem, Chang, and Antonio's (2005) campus climate framework to institutional commitment to racial/ethnic diversity. Using EQS, a measurement model based on a covariance structure was tested followed by a separate model for private institutions, then public. The final measurement model was a two-group comparison to detect and examine potential group invariance between public and private institutions. This test for group invariance across public and private institutions was completed to detect any distinctions in how control may affect the articulation of policies and practices associated with institutional commitment to racial/ethnic diversity. Equality constraints were imposed across public and private institutions to address potential problems with model identification (Bentler, 2006; Byrne, 2006).

Joreskog (1971) recommends that a test of the model for the entire sample or data set precede any test for group invariance. Thus, the first analytic step taken during confirmatory factor analyses was to complete analysis of a measurement model for the entire data set. The confirmatory measurement model was designed to assess commitment to policies and practices that support racial and ethnic diversity. Seven factors were included in these analyses. Core leadership support for diversity as a campus priority is a three-item factor based on the response to "Indicate the extent to which you agree with the following potential descriptions of your institution" which has been previously used by Rowley, Hurtado, and Ponjuan (2005). The items were scored on a four-point Likert scale (1 = "Strongly disagree" to 4 = "Strongly agree"). Promotes and rewards diversity related activities is comprised of four items where respondents indicated their institution's level of participation in various activities. These activities were scored on a four-point scale (1 = "Never" to 4 = "Always") and included: (a) recognizes campus community members for participation in diversity activities; (b) promotes diversity-related research; (c) publicizes the institution's accomplishments related to diversity; and (d) encourages campus-wide participation in conferences on diversity.

The organizational/structural dimension of the Milem, Chang, and Antonio (2005) model included curricular initiatives that support racial/ethnic diversity. The factor used in these analyses to capture curricular initiatives includes five items ranging from courses that incorporate writing and research about different ethnic groups to requiring students to enroll in at least one cultural course and was scored on a four-point Likert scale (1 = "strongly disagree" to 4 = "strongly agree"); this represents initiatives that are largely

faculty-driven. The items used to create Increasing Compositional Diversity and Support for Creating a Diverse Learning Environment were scored on a four point scale (1 = "not a priority" to 4 = "highest priority"); respondents were asked to indicate the extent to which specific activities were priorities at their institution. Previous research (see Rowley, et al. 2005) has used measures of Commitment to Increasing Compositional Diversity and Support of Creating a Diverse Learning Environment in a single five-item factor. However, for these analyses, discrete measures are preferable. The research questions aim to identify any differences in the characterizations of commitment to compositional diversity and commitment to create diverse learning environments across public and private institutions. Values Democratic Skills in undergraduate experience and two previously mentioned factors are the three factors in the Compositional Diversity and Psychological Dimension portions of Figure 2.1. I elected to use four items in the Promotes and Rewards Diversity-Related Activities, unlike Rowley et al. who included evaluation and assessment in their factor; given my SEM analytic approach to completing confirmatory factor analyses, I sought to have a discrete, refined measure, and did not include the evaluation/assessment item in my factor.

Fit Indices

Norms established in the practice and literatures of SEM were used to evaluate the measurement and CFA models. Recommended indicators for goodness of fit include a measure's normed fit index (NFI), non-normed fit index (NNFI), comparative fit index (CFI) and root mean square error of approximation (RMSEA) (Raykov, Tower, & Nesselroade, 1991; Rigdon, 1995). The NFI, suggested by Bentler and Bonnet (1980), and the more modern CFI recommended by Bentler (1990) are indicators based on a

comparison of the hypothesized model and the independent models. The NNFI is similar to the NFI but accounts for the complexity of a model (i.e., the number of factors, items, and hypothesized relationships in a model) (Byrne, 2006).

The RMSEA is a misfit indicator that represents the error of approximation inherent in using a sample, as is typical in social science research, when the entire population is not available. According to Bryne (2006), the RMSEA is useful because it assesses model misspecification, gives an index that can be used to assess model quality, and can be cited using confidence intervals (p.100). A RMSEA equal or under .06 is evidence of acceptable fit (Hu & Bentler, 1999). A less acceptable fit would range between .08 and .10 (Browne & Cudek, 1993; MacCallum, Browne, and Sugawara, 1996). Therefore, it is reasonable to say that a minimum range for the RMSEA should be between .08 and .10; an acceptable fit ranges between .06 and .08, and that a good fit is at or below .06. It is this last of these thresholds, at or below .06, which is used in this study.

Limitations

Conceptualization of the campus climate for diversity and assessing institutional commitment to the racial/ethnic diversity model suggests that the ideal data set to evaluate their conceptualization of the institutional context for racial and ethnic diversity would be one that has both student and institutional survey data (see Hurtado et al. 1999, Milem et al. 2005, and Williams & Clowney, 2007). However, for the purposes of this study, only institutional data are used. Therefore, this study limited its analyses to public and private institutions and did not disaggregate institutions by type (i.e., doctoral, masters, baccalaureate). Additionally, this study is based on one individual or small group of individuals who completed the survey on behalf of their institution. While Chief

Academic Officers have a key function on campuses for setting policies related to racial and ethnic diversity, a more comprehensive study would include objective measures and responses from a wider cross section of administrators, faculty, staff, and students in assessing institutional commitment to racial and ethnic diversity.

Results

I present the results in three sections. First, I present results from the independent sample t-tests that examined differences between public and private institutions. Next, I summarize the results from my exploratory factory analyses. Finally, I address the confirmatory factor analyses performed using SEM techniques. This latter section includes a report of the measurement model and two-group comparison measurement model for public and private institutions.

Independent Sample t-test

Public and private institutions diverged on most of the factors. For each of the three items in the Core Leadership Support Diversity factor, public institutions had statistically significant higher means than private institutions. For the item University leaders regularly articulate the value of diversity, public institutions had a mean of 3.38 compared to a mean of 3.21 for private institutions (t(3.466), p<.01); public institutions had a mean of 3.26 compared to 3.10 for private institutions for the item This institutions has a long-standing commitment to diversity issues (t(2.966), p<.01). For the item Strategic planning documents contain goals for diversity, public institutions had a mean of 3.43 compared to 3.23 t(3.670), p<.001).

Promoting and rewarding diversity related activities was the second factor for which public institutions were more likely to indicate statistically significant (all p<.001)

higher rates of participation in the four activities used in the factor. For publics means ranged from 2.45 to 2.94 and for privates the range was 2.13 to 2.74 (see Table 2.1).

The third factor was Increasing Compositional Diversity a Priority. The mean for diversifying the faculty was 3.13 at public institutions and 2.95 for private, and this difference, $t(3.279)$ was statistically significant ($p<.01$). For Having the recruitment of students of color as a high institutional priority, the mean for public institutions was 3.12 compared to 2.88, which was statistically significant, $t(4.407)$, $p<.001$.

Support for creating a diverse learning environment, a 3-item factor, had only one item where the mean difference between public and private institutions was statically significant ($p<.05$)—creating a diverse multicultural learning environment on campus, where the mean was 3.11 for public and 2.98 for private institutions. There were three items in the Democratic Skills factor, and the only item to have a significant ($p<.05$) mean difference between public ($M=3.25$) and private institutions ($M=3.37$), $t(-2.324)$ was the importance placed on students' developing the ability to see the world from someone else's perspective.

Only two out of the five items in the Curricular Initiatives factor had statistically significant different means for public and private institutions. The mean for public institutions where students are required to compete a community-based experience was 2.31 compared to 2.50 for privates institutions, $t(-3.028)$, $p<.01$). Public institutions were more likely to report requiring students to enroll in a least one diversity related course (public institutions $M=3.00$, private $M=2.80$, $t(2.669)$, $p<.01$). The remaining three items did not have significant differences (living learning programs, courses that incorporated

diversity into writings and research, and providing opportunities for intensive discussion between students).

Three out of five of the items in the factor that captured Institutions' cocurricular efforts to support racial/ethnic diversity had statistically significant mean differences between public and private institutions. For presentations, performances, and art exhibits, public institutions had a mean of 5.91 compared to 5.44, (t(4.69), p<.001). The mean on debates and panels about diversity issues was 5.54 for public institutions and 5.17 (t(3.412), p<.01) for private. Lastly, race awareness workshops also revealed public institutions had a higher, statistically significant mean (M=5.00 vs. M=4.69, t(2.546), p<.05). The differences for the other two items in this factor were not statistically significant (diversity awareness program in orientation and an intergroup dialogue program).

Factors

The factors derived from the exploratory factor analyses were used in the subsequent analyses of a measurement modal to determine if these scales fit the data well and are discussed from this point forward. Factors generated as part of the exploratory factor analyses are presented in Table 2.2. I completed analyses to test for reliability of the factors using SPSS 14.0. The Cornbach's alphas reliability estimates ranged from .664 to .863 for the entire sample. Because this study aims to examine differences between public and private institutions, I completed additional analyses to obtain separate Cornbach's alpha reliability estimates for private and public institutions that ranged from .641 to .875 for private institutions and .700 to .899 for public institutions. The gap between private and public institutions for reliabilities ranged from .004 to .066,

revealing that individuals responding to the survey from private and public institutions responded to items in a similar manner.

A total of 25 independent variables were used in the seven factors. Consistently, public institutions had higher means on factor items, with three notable exceptions. First, the Curricular Initiative Support Racial/Ethnic Diversity factor included five items. Public institutions had a higher mean for living learning communities that address democracy issues and requiring students to enroll in a diversity course. Private institutions were higher on courses that incorporate writing and research about different ethnic groups and requiring students to complete a community-based experience. Both types of institution were similar for providing opportunity for intensive discussion between students. This is interesting because the private institutions had higher means for all three items in the Values Democratic Skills in Undergraduate Experiences factor, including tolerance of other with different beliefs, ability to see the world from others' perspectives, and ability to work cooperatively with diverse others.

Measurement Model[3]

After examining descriptives and frequencies, I determined that in order to respond to the second research question, it was appropriate to compare a measurement model across control status (public or private institution) (see Table 2.1 for the means and standard deviations for the variables used to create factors). Modeling invariance across public and private institutions and examining the goodness of fit measures for the group invariance test provides a broad context for institutional commitment to policies and practices that support racial and ethnic diversity. Fit indices for the measurement model

[3] Measurement model loadings may differ from those in Table 2.2 as the measurement models accounted for measurement error.

Table 2.1 ***Means and Standard Deviations of Institutional Commitment to Diversity Variables by Public/Private Status and T-tests***

	Private			Public			Group Comparison		
Factors and Variables	***Mean***	***SD***	***n***	***Mean***	***SD***	***n***	***t***	***df***	***p***
CPInstDiv Core leadership support for diversity									
q24 University leaders regularly articulate the value of diversity	3.21	.66	423	3.38	.67	318	3.466	739	**
q25 This institution has a long-standing commitment to diversity issues	3.10	.73	423	3.26	.69	315	2.966	736	**
q27 Strategic planning documents contain goals for diversity	3.23	.71	417	3.43	.72	315	3.670	730	***
PromDAct1 Promotes and rewards diversity related activities									
q39 Recognizes . . .for their participation in diversity programs	2.65	.68	422	2.83	.69	317	3.592	737	***
q40 Promotes research that has been conducted in the area of diversity	2.13	.72	419	2.45	.72	313	5.804	730	***
q41 Publicizes the institutions accomplishments related to diversity	2.50	.75	421	2.87	.71	316	6.765	735	***
q42 Encourages campus-wide participation in diversity conferences	2.74	.73	423	2.94	.68	317	3.904	738	***
Curicular2 Curricular initiatives support racial/ethnic diversity									
q72 Living-learning communities address democracy issues	2.89	.73	410	2.95	.77	309	1.127	717	NS
q73 Courses incorporate writings and research about different ethnic	3.28	.60	419	3.23	.57	314	-1.204	731	NS
q74 Requiring students to complete a community-based experience	2.50	.83	415	2.31	.80	308	-3.028	721	**
q75 Providing opportunities for intensive discussion between students	3.01	.69	420	3.01	.70	313	-.152	731	NS
q76 Requiring students to enroll in at least one cultural course	2.80	1.02	416	3.00	1.00	312	2.669	726	**
cICompDiv Increasing compositional diversity a priority									
q12 Increasing the representation of minorities and women in the faculty	2.95	.74	426	3.13	.74	317	3.279	741	**
q14 Recruiting more underrepresented students	2.88	.78	425	3.12	.72	318	4.407	741	***
cPriSupCDiv Support for creating a diverse learning environment									
q11 Maintain campus climate where differences of opinion discussed openly	3.20	.70	425	3.21	.70	318	.237	741	NS
q13 Developing of appreciation for a multicultural society students faculty	3.19	.71	424	3.20	.64	318	.310	740	NS
q15 Creating a diverse multicultural learning environment on campus	2.98	.74	424	3.11	.71	317	2.409	739	*
DemocOut1 Values democratic skills in undergraduate experience									
q62 Tolerance of others with different beliefs	3.42	.69	422	3.32	.73	316	-1.783	736	NS
q69 Ability to see the world from someone else's perspective	3.37	.66	422	3.25	.71	315	-2.324	735	*
q70 Ability to work cooperatively with diverse people	3.47	.65	422	3.42	.68	316	-1.098	736	NS
CurDivPrac3 Cocurricular diversity programs and practices									
q78 Presentations, performances, and art exhibits on diversity	5.44	1.46	422	5.91	1.20	316	4.629	736	***
q79 Debates and panels about diversity issues	5.17	1.54	421	5.54	1.36	316	3.412	735	**
q80 A diversity awareness program in orientation	5.09	1.64	422	5.07	1.64	315	-.172	735	NS
q82 Race awareness workshops	4.69	1.69	420	5.00	1.51	314	2.546	732	*
q85 An intergroup dialogue program	4.03	1.83	414	4.22	1.77	312	1.404	724	NS

*p<.05, **p<.01, ***p<.001

Table 2.2 ***Commitment to Diversity Factor Loadings and Reliabilities (n=744)***

Factor scales and Item Wording	All n=744 *(alpha)*	Private n=426 *(alpha)*	Public n=318 *(alpha)*
	Factor Loadings		
CPInstDiv Core leadership support for diversity [a]	***(.734)***	***(.715)***	***(.744)***
q24 University leaders regularly articulate the value of diversity	.909	.881	.940
q25 This institution has a long-standing commitment to diversity issues	.650	.666	.621
q27 Strategic planning documents contain goals for diversity	.551	.512	.578
PromDAct1 Promotes and rewards diversity related activities [b]	***(.792)***	***(.715)***	***(.781)***
q39 Recognizes . . .for their participation in diversity programs	.680	.674	.675
q40 Promotes research that has been conducted in the area of diversity	.669	.651	.648
q41 Publicizes the institutions accomplishments related to diversity	.708	.688	.688
q42 Encourages campus-wide participation in conferences diversity	.738	.730	.738
Curicular2 Curricular initiatives support racial/ethnic diversity [a]	***(.664)***	***(.641)***	***(.700)***
q72 Living-learning communities address democracy issues	.592	.514	.679
q73 Courses incorporate writings and research about different ethnic	.608	.598	.627
q74 Requiring students to complete a community-based experience	.486	.451	.546
q75 Providing opportunities for intensive discussion between students	.614	.572	.664
q76 Requiring students to enroll in at least one cultural course	.461	.509	.424
cICompDiv Increasing compositional diversity a priority [c]	***(.754)***	***(.759)***	***(.732)***
q12 Increasing the representation of minorities and women in the faculty	.777	.782	.759
q14 Recruiting more underrepresented students	.777	.782	.759
cPriSupCDiv Support for creating a diverse learning environment [c]	***(.779)***	***(.779)***	***(.783)***
q11 Maintain campus climate where differences of opinion discussed openly	.559	.576	.537
q13 Developing of appreciation for a multicultural society students faculty	.842	.825	.867
q15 Creating a diverse multicultural learning environment on campus	.821	.808	.844
DemocOut1 Values democratic skills in undergraduate experience [d]	***(.842)***	***(.849)***	***(.899)***
q62 Tolerance of others with different beliefs	.743	.788	.688
q69 Ability to see the world from someone else's perspective	.796	.803	.782
q70 Ability to work cooperatively with diverse people	.869	.835	.915
CurDivPrac3 Existence of cocurricular diversity programs [e]	***(.863)***	***(.875)***	***(.841)***
q78 Presentations, performances, and art exhibits on diversity	.739	.788	.647
q79 Debates and panels about diversity issues	.860	.873	.828
q80 A diversity awareness program in orientation	.729	.754	.719
q82 Race awareness workshops	.792	.809	.753
q85 An intergroup dialogue program	.648	.628	.681

a Indicate the extent to which you agree with the following potential descriptions of your institution. Four-point scale: From Strongly disagree = 1 to Strongly agree = 4.

b Indicate your institutions level of participation in each activity. Four-point scale: From Never = 1 to Always = 4.

c Indicate the extent to which you think the following are priorities at your institution. Four-point scale: From Not a priority = 1 to Highest priority = 4.

d How important is it that students increase/enhance the following skills and dispositions prior to degree completion. Four-point scale: From Not important = 1 to Essential = 4.

e How strongly does your institution support each of the following activities for student learning about diversity and democracy. Seven-point scale: From Does not support =1 to Strongly supports = 7.

for the entire sample of institutions were NFI=.929, NNFI=.950, CFI=.958, RMSEA=.043, χ^2/df=2.38. For the two-group comparison measurement model which tested for group invariance between public and private campuses, the fit indices were NFI=.901, NNFI=.953, CFI=.959, RMSEA=.041, χ^2/df=1.63.

Core Leadership Policies and Practices.

Three items represented the latent factor Core Leadership Support for Diversity (see Table 2.3). The item University leaders regularly articulate the values of diversity had a higher loading for private institutions (.812) than public (.792). For Long-standing commitment to diversity issues and Strategic planning documents contain goals for diversity, academic officers at public institutions rated their institutions at statistically significant higher rates and had higher loadings compared to those at private institutions (see Table 2.1 for means and t-tests; Table 2.3 for loadings). This four-item factor had two items where public institutions had higher loadings and two where private institutions had higher loadings and R^2. However, these differences were small.

Institutional Priorities for Increasing Compositional Diversity.

For the two items in this factor, there were interesting discrepancies between the two types of institutions. Public institutions were more likely to report recruitment and increased representation of faculty and students of color as a high priority than private institutions. While the factor loadings were not as disparate for recruiting more underrepresented students (.757 for public institutions, .748 for private), the difference in loadings for diversifying the faculty was much stronger—.467 for public institutions and .821 for private.

Table 2.3 ***Measurement Model Item Loadings and R^2 for Institutional Commitment to Diversity Variables by All, Public/Private Status***

	Entire Sample (All Institutions)		Two-group Comparison			
			Private		Public	
Factors and Variables	**Loading**	**R^2**	**Loading**	**R^2**	**Loading**	**R^2**
CPInstDiv Core leadership support for diversity						
q24 University leaders regularly articulate the value of diversity	.807	.650	.812	.659	.792	.627
q25 This institution has a long-standing commitment to diversity issues	.704	.495	.682	.465	.715	.511
q27 Strategic planning documents contain goals for diversity	.618	.381	.593	.351	.616	.379
PromDAct1 Promotes and rewards diversity related activities						
q39 Recognizes . . .for their participation in diversity programs	.675	.456	.674	.455	.652	.425
q40 Promotes research that has been conducted in the area of diversity	.694	.481	.671	.451	.666	.444
q41 Publicizes the institutions accomplishments related to diversity	.697	.486	.666	.444	.688	.474
q42 Encourages campus-wide participation in diversity conferences	.733	.537	.723	.523	.730	.533
Curicular2 Curricular initiatives support racial/ethnic diversity						
q72 Living-learning communities address democracy issues	.589	.347	.555	.308	.730	.384
q73 Courses incorporate writings and research about different ethnic	.620	.385	.584	.341	.619	.432
q74 Requiring students to complete a community-based experience	.410	.168	.387	.150	.657	.208
q75 Providing opportunities for intensive discussion between students	.640	.409	.610	.372	.456	.462
q76 Requiring students to enroll in at least one cultural course	.460	.212	.435	.189	.680	.218
cICompDiv Increasing compositional diversity a priority						
q12 Increasing the representation of minorities and women in the faculty	.804	.647	.821	.673	.467	.573
q14 Recruiting more underrepresented students	.753	.568	.748	.559	.757	.578
cPriSupCDiv Support for creating a diverse learning environment						
q11 Maintain campus climate where differences of opinion discussed openly	.588	.345	.592	.350	.680	.328
q13 Developing of appreciation for a multicultural society students faculty	.818	.669	.806	.650	.467	.713
q15 Creating a diverse multicultural learning environment on campus	.829	.687	.811	.657	.757	.725
DemocOut1 Values democratic skills in undergraduate experience						
q62 Tolerance of others with different beliefs	.756	.572	.777	.604	.740	.547
q69 Ability to see the world from someone else's perspective	.804	.647	.804	.647	.801	.642
q70 Ability to work cooperatively with diverse people	.854	.729	.840	.706	.863	.745
CurDivPrac3 Cocurricular diversity programs and practices						
q78 Presentations, performances, and art exhibits on diversity	.766	.586	.778	.605	.733	.537
q79 Debates and panels about diversity issues	.851	.724	.858	.735	.823	.678
q80 A diversity awareness program in orientation	.726	.527	.767	.588	.678	.460
q82 Race awareness workshops	.770	.592	.786	.617	.732	.535
q85 An intergroup dialogue program	.660	.436	.670	.448	.626	.391

Fit indices for the entire sample were NFI=.929, NNFI=.950, CFI=.958, RMSEA=.043, χ^2/df=2.38. The two-group comparison model was fully constrained to test for group invariance between public and private institutions; its fit indices were NFI=.901, NNFI=.953, CFI=.959, RMSEA=.041, χ^2/df=1.63: Loadings may differ from those is in Table 2.2 as the measurement models accounted for measurement error.

Values in Undergraduate Education.

Public and private institutions had distinctly different loadings for the items used to measure this latent construct, the largest gap for having the Development of an appreciation for a multicultural society amongst students and faculty as a priority. Public institutions had a loading of .467 vs. nearly twice as high (.806) for private institutions. Because of the inconsistent loadings and the results of the t-tests, this is definitely an area where separate analyses for public and private institutions should be completed in future research. Tolerance of others and Perspective taking had higher loadings for private compared to public institutions, and the reverse was true for Working cooperatively in groups. Curricular initiatives that support racial/ethnic diversity, largely faculty-driven, was comprised of five items. Public institutions had sharply higher loadings and R^2 for four out of the five items in this factor (see Table 2.3). The reverse was true for only one item–Providing opportunity for intensive discussion between students.

Cocurricular activities.

Public facilities were more likely to report that their institutions strongly supported programs such as presentations, performances and art exhibits on diversity, debates, and panels regarding diversity issues, and race awareness programs. All five items had lower loadings for public institutions.

Covariances among latent constructs.

The covariances among latent factors were distinct in many cases (see Tables, 2.3, 2.4 and 2.5). For 16 out of 31 possible covariances, public institutions had higher covariance compared to public. Among the 16 items that were higher, the starkest differences were between the following three factors and Existence of cocurricular

diversity programs: Promotes and rewards diversity related activities, Increasing compositional diversity and Support for creating a diverse learning environment. For private institutions, only 5 covariances where higher than those for public institutions; the starkest difference was the covariance between Curricular initiatives and Valuing democratic skills. When private institutions had the higher covariance, differences were not as stark as those that were higher for public institutions.

For example, the covariance between Core leadership support for diversity and Valuing democratic skills development as part of the undergraduate experience was .120 for the entire sample, .133 for private institutions, and .108 for public. These results suggest that for private institutions there is a closer relationship between articulating a commitment to diversity and valuing the development of the skills necessary for participation in a diverse democracy. The articulation of a commitment to racial/ethnic diversity by core leadership is more strongly related to the existence of cocurricular diversity programs at public institutions compared to private. The largest covariances for core leadership support for diversity with another factor was with support for creating a diverse learning environment and existence of cocurricular diversity programs, indicating that overall support from campus leaders is related to specific institutional priorities such as maintaining a campus climate where differences are valued and respected and actual cocurricular diversity programs and events.

Discussion

This study contributes to understanding how institutions enact the commitment to racial/ethnic diversity by accomplishing the following four tasks. First, the exploratory factor analyses in this study characterize how institutions articulate and enact their

policies and practices that support racial/ethnic diversity. Second, public institutions reported significantly higher rates of support for diversity by core leadership, increasing compositional diversity, and promoting and rewarding diversity related activities. Third, the measurement model on the entire sample confirms the applicability of campus climate models to assessing institutional commitment to racial and ethnic diversity. Fourth, the measurement model, which tested for group invariance between public and private institutions, reveals differences in how higher education institutions articulate their commitment to policies, practices, and programs that foster campus climates inclusive of racial and ethnic diversity.

Although the models fit the data, the distinct loadings for private and public institutions suggest ways of recognizing diversity and providing opportunities for diversity to flourish depends on the control status of the campus. Given the timing of the survey (2001), this may be a reflection of the cumulative cooling effect of Hopwood, Proposition 209 in California, Washington 200, and the then impending court decisions regarding the University of Michigan's affirmative action policies. The inconsistent loadings between public and private, accompanied by the good fit indices for the measurement model, suggests that the commitment to racial and ethnic diversity is articulated and enacted in distinct ways in public and private institutional contexts. Further research should approach the phenomena at public and private institutions differently. For example, any attempt to hypothesize and test relationships should begin with a SEM model for the entire sample, followed by a test for group invariance across the two types of institutions. Next, SEM models should be developed separately.

The factors where public institutions scored higher than private institutions were (a) core leadership support for diversity; (b) support and recognition for diversity-related activities on campus; and (c) making increases in compositional diversity a priority. Such policies and practices include recognizing campus community members for their participation in diversity activities, promoting diversity research, publicizing the institution's diversity accomplishments and efforts and encouraging campus-wide participation in conferences and workshops related to diversity and civic engagement. These policies and practices may positively influence diverse student enrollment and faculty/staff hiring, infusion of diversity into the curriculum, increase cross-racial interactions, and mitigate the effects of negative perceptions of the campus climate for diversity. More specifically, campuses that positively support diversity may have a campus climate where racial attitudes are influenced by the institution's making diversity a priority. This may be true for the value an institution places on students developing democratic skills during their undergraduate years. It may be that institutions, which hold the development of democratic skills as an institutional value, also promote and reward diversity on their campuses. This hypothesized relationship merits exploration in future research.

These analyses suggest that public campuses strategically implement cocurricular diversity programs to enact their professed commitment to racial/ethnic diversity. It may be that such programs and initiatives fit well with public missions and an orientation to serve a public good. By contrast, valuing democratic skills development as an integral part of the undergraduate experience may be how private institutions enact their commitment to racial/ethnic diversity. This contrast is interesting because it appears as if

public institutions focus on programs that foster racially/ethnically inclusive campus environments and prepare students to thrive in a diverse society and globally interdependent environments. Private institutions have this as a principal but do not appear to have as strong a focus on related programs as their public counterparts. This is simply one way to interpret the covariance structure and is an area for further study.

This study focuses on elements of Milem et al.'s organizational/structure dimension of their campus climate framework. Specifically, I created several factors related to curricular and cocurricular initiatives designed to support racial and ethnic diversity in the college context. Further, I explored diversity related to organizational decision-making policies. Factors capturing institutional commitments to increasing compositional diversity and institutional priorities and actions, which may affect the psychological climate and students' behaviors, were created. Overall results suggest there may be different models based on institutional control (public vs. private). Further, these exploratory analyses indicate that public and private institutions enact their commitments to racial and ethnic diversity in distinct ways.

Public institutions had higher means related to core leadership for diversity, promoting and rewarding diversity and prioritizing the increase of diverse faculty and staff. This suggests these institutions are committed to diversity in ways distinct from their private counterparts. This could be due to the changing landscape for race and ethnicity in higher education and pressure on some public universities to adapt color-blind admission policies. Additionally, pressure from the public to keep admissions "fair" can affect the campus climate and make a campus unfriendly to racially and ethnically diverse students. Institutions may respond by more clearly articulating diversity as an

institutional value, one that is sought by increasing the number of diverse members of the community and rewarded through recognition and praise from core leadership.

The subtle differences in the curricular initiatives that support racial and ethnic diversity suggest that the faculty-governed or driven initiatives are distinct form those programs and activities typically run by student affairs professionals. Determining who initiates specific programs relative to institutional values is in an important piece of information to have when assessing a campus climate. At present, the Millen et al. model (2005) does not reflect these fine distinctions.

Areas where public and private institutions are most consistent were items related to democratic skills and pluralistic perspectives, both of which are needed for college graduates to function in a global marketplace and society. This suggests the addition of Democratic Merit to the Milem et al. (2005) model, possibly bridging the psychological and behavioral dimensions. Such an addition would connect the psychological climate that affects students' perceptions of racial tension to their behaviors and cross-racial interactions.

This study is exploratory in nature, and future research is needed to complete tests using the measures from the Institutional Survey on Civic Engagement and Diversity suggested by Milem, Chang, and Antonio (2005). Future research should focus on a more expansive investigation into the differences between public and private institutions on support for racial and ethnic diversity. Using SEM techniques, a logical next step would be to develop hypotheses, based on findings from this study, separately by institution type. A possible dependent measure might be the actual compositional diversity of faculty, staff, and students on campuses. Other areas of interest include region of the

county, perhaps by federal court district to examine the potential effects of the sociopolitical climate for affirmative action.

Conclusion

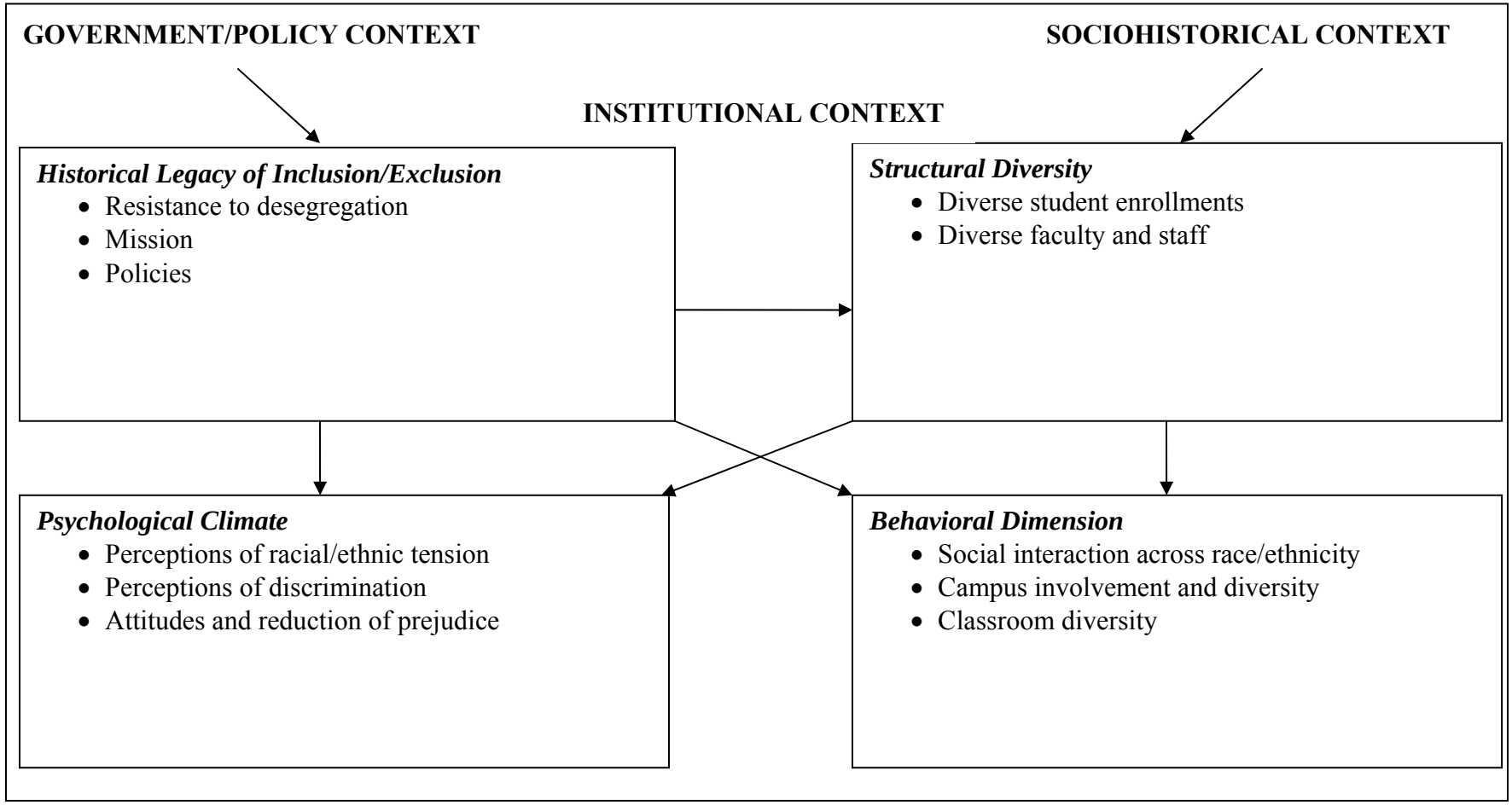
In the post-affirmative action era, the discourse on race and ethnicity in higher education has been transformed to a focus on diversity. Diversity is, in actuality, is often used as a euphemism for race and ethnicity, but in the post-affirmative action era has been expanded to encompass gender, sexual orientation, and class heterogeneity in the college context. While *Gratz* and *Grutter* can be used as a temporal demarcation for the beginning of the post-affirmative action era, this change began before the Supreme Court made these decisions. Since these 2003 Supreme Court decisions at University of Michigan, there has been an expansion of constraints on the use of race-conscious policies in higher education. As a result, higher education administrators' ability to enact their commitment to racial/ethnic diversity has been constrained. Consequently, it is important to understand how campuses continue to support racial/ethnic diversity in principled ways that are both educationally sound and legal. This is especially important as U.S. colleges and universities must prepare students to function in and a new era of global interdependence. A focus on the role higher education institutions can and must play in this dynamic sociopolitical environment is currently lacking from the broader discourse on higher education.

As part of the change in what diversity means, there has been as shift from focusing on equal access (Williams & Clowney, 2007) to redefining merit. Amidst this shift in how higher education policy makers, administrators, and scholars talk about access for people of color, there is a broader call for institutional accountability for

students' outcomes. However, the discourse on race and ethnicity is not linked in concrete ways to calls to hold institutions accountable for students' outcomes. At the beginning of the twenty-first century, the most important college student outcome is arguably students' ability to function in a globally interdependent world. Cultivating this ability requires institutions to prepare their students for the diverse world in which they will work. This preparation must include and go beyond developing multilingual students. Institutions are obligated, as part of their educational missions, to prepare their graduates to effectively work with culturally diverse individuals in various settings. Given the homogeneity of students' pre-college environments, college is an opportune time for students to learn how to effectively interact with diverse others.

Appendix 2.1

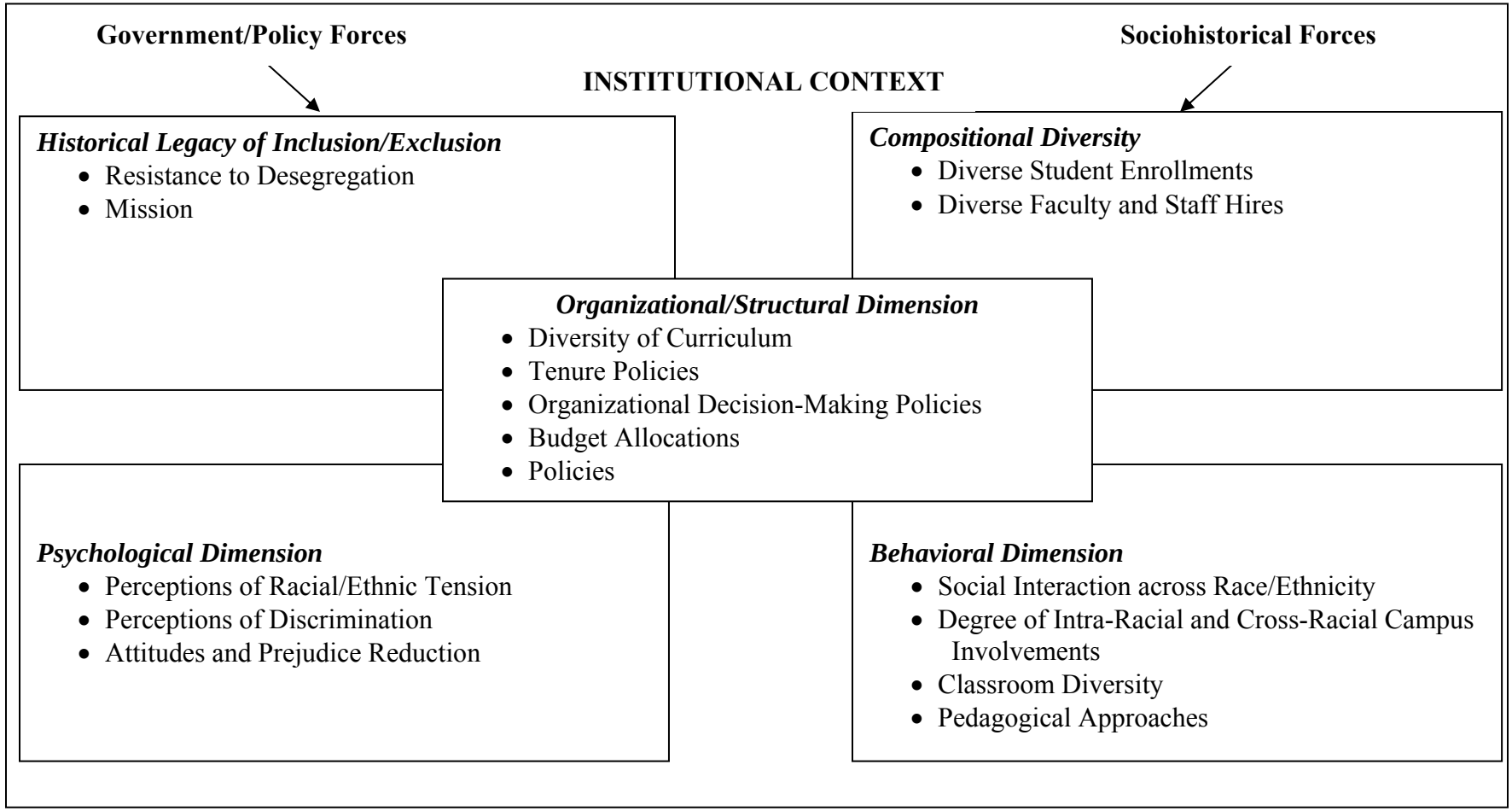
Elements Influencing the Climate for Racial/Ethnic Diversity



From Hurtado, Milem, Clayton-Pederson, and Allen (1999).

Appendix 2.2

Campus Climate Framework



From Milem, Chang, and Antonio (2005).

Appendix 2.3 ***Covariances among Factors for All institutions (n=744)***

	F1	F2	F3	F4	F5	F6	F7
F1 Core leadership support for diversity [a]	1						
F2 Promotes and rewards diversity related activities [b]	.178	1					
F3 Curricular initiatives support racial/ethnic diversity [a]	.130	.153	1				
F4 Increasing compositional diversity a priority [c]	.194	.198	.131	1			
F5 Support for creating a diverse learning environment [c]	.209	.209	.176	.309	1		
F6 Values democratic skills in undergraduate experience [d]	.118	.132	.161	.135	.178	1	
F7 Existence of cocurricular diversity programs [e]	.367	.453	.390	.413	.463	.333	1

Appendix 2.4 ***Covariances among Factors for Private Institutions (n=426)***

	F1	F2	F3	F4	F5	F6	F7
F1 Core leadership support for diversity [a]	1						
F2 Promotes and rewards diversity related activities [b]	.162	1					
F3 Curricular initiatives support racial/ethnic diversity [a]	.136	.142	1				
F4 Increasing compositional diversity a priority [c]	.172	.174	.142	1			
F5 Support for creating a diverse learning environment [c]	.189	.196	.157	.296	1		
F6 Values democratic skills in undergraduate experience [d]	.133	.149	.177	.134	.173	1	
F7 Existence of cocurricular diversity programs [e]	.326	.370	.367	.353	.402	.329	1

Appendix 2.5 ***Covariances among Factors for Public Institutions (n=318)***

	F1	F2	F3	F4	F5	F6	F7
F1 Core leadership support for diversity [a]	1						
F2 Promotes and rewards diversity related activities [b]	.172	1					
F3 Curricular initiatives support racial/ethnic diversity [a]	.116	.155	1				
F4 Increasing compositional diversity a priority [c]	.190	.197	.114	1			
F5 Support for creating a diverse learning environment [c]	.212	.214	.176	.313	1		
F6 Values democratic skills in undergraduate experience [d]	.108	.132	.138	.140	.181	1	
F7 Existence of Cocurricular diversity programs [e]	.362	.485	.375	.426	.492	.344	1

a Indicate the extent to which you agree with the following potential descriptions of your institution. Four-point scale: From Strongly disagree = 1 to Strongly agree = 4.
b Indicate your institutions level of participation in each activity. Four-point scale: From Never = 1 to Always = 4.
c Indicate the extent to which you think the following are priorities at your institution. Four-point scale: From Not a priority = 1 to Highest priority = 4.
d How important is it that students increase/enhance the following skills and dispositions prior to degree completion. Four-point scale: From Not important = 1 to Essential = 4.
e How strongly does your institution support each of the following activities for student learning about diversity and democracy. Seven-point scale: From Does not support =1 to Strongly supports = 7.

Appendix 2.6

Matrix of Correlations among Institutional Commitment to Ethnic/Racial Diversity (All institutions)

	q24	q25	q27	q39	q40	q41	q42	q72	q73	q74	q75	q76	q12	q14	q11	q13	q15	q62	q69	q70	q78	q79	q80	q82	q85
q24	1																								
q25	.596	1																							
q27	.504	.359	1																						
q39	.398	.369	.329	1																					
q40	.432	.371	.375	.454	1																				
q41	.449	.382	.381	.467	.499	1																			
q42	.424	.381	.364	.526	.480	.512	1																		
q72	.268	.299	.233	.301	.328	.244	.262	1																	
q73	.343	.346	.201	.255	.302	.182	.306	.360	1																
q74	.124	.171	.096	.160	.129	.095	.172	.314	.246	1															
q75	.305	.348	.238	.275	.276	.265	.297	.368	.368	.319	1														
q76	.247	.236	.204	.235	.274	.216	.231	.253	.330	.197	.243	1													
q12	.513	.420	.432	.328	.393	.371	.386	.255	.248	.126	.278	.200	1												
q14	.426	.350	.408	.306	.363	.378	.352	.261	.207	.098	.187	.175	.606	1											
q11	.404	.350	.224	.269	.265	.253	.280	.187	.221	.107	.297	.162	.462	.377	1										
q13	.497	.437	.398	.370	.335	.348	.394	.320	.327	.144	.296	.285	.589	.540	.469	1									
q15	.517	.487	.425	.390	.414	.394	.422	.317	.332	.166	.344	.271	.564	.579	.459	.692	1								
q62	.304	.304	.246	.245	.266	.176	.317	.287	.319	.182	.345	.205	.303	.225	.401	.339	.312	1							
q69	.271	.284	.212	.245	.269	.197	.270	.295	.328	.213	.363	.211	.241	.220	.304	.333	.333	.593	1						
q70	.314	.322	.227	.265	.271	.227	.308	.287	.323	.197	.332	.165	.314	.259	.335	.359	.330	.649	.694	1					
q78	.425	.390	.364	.360	.397	.381	.431	.307	.385	.124	.330	.292	.401	.367	.317	.418	.401	.327	.304	.334	1				
q79	.438	.395	.400	.414	.436	.401	.466	.305	.362	.127	.411	.266	.409	.376	.369	.450	.442	.300	.324	.351	.739	1			
q80	.410	.401	.361	.393	.372	.355	.424	.334	.330	.181	.373	.284	.361	.339	.310	.395	.418	.317	.308	.315	.496	.596	1		
q82	.416	.389	.349	.346	.403	.399	.415	.315	.319	.205	.349	.271	.361	.325	.299	.373	.394	.288	.315	.320	.530	.641	.622	1	
q85	.401	.367	.360	.315	.413	.339	.357	.387	.269	.280	.391	.274	.331	.313	.293	.354	.365	.268	.307	.298	.444	.520	.482	.580	1

Appendix 2.7

Matrix of Correlations among Institutional Commitment to Ethnic/Racial Diversity (Public institutions)

	q24	q25	q27	q39	q40	q41	q42	q72	q73	q74	q75	q76	q12	q14	q11	q13	q15	q62	q69	q70	q78	q79	q80	q82	q85
q24	1																								
q25	.583	1																							
q27	.540	.355	1																						
q39	.318	.314	.337	1																					
q40	.408	.423	.396	.426	1																				
q41	.384	.390	.440	.444	.467	1																			
q42	.375	.368	.362	.525	.455	.499	1																		
q72	.308	.329	.307	.328	.347	.279	.245	1																	
q73	.335	.376	.216	.249	.297	.120	.288	.426	1																
q74	.145	.246	.165	.168	.192	.099	.131	.374	.268	1															
q75	.313	.388	.331	.247	.305	.280	.270	.421	.412	.417	1														
q76	.222	.219	.208	.204	.259	.184	.202	.298	.306	.167	.202	1													
q12	.492	.424	.414	.309	.367	.359	.317	.292	.217	.175	.287	.177	1												
q14	.365	.319	.422	.316	.327	.392	.280	.334	.249	.164	.296	.168	.575	1											
q11	.422	.334	.253	.263	.270	.228	.240	.186	.207	.111	.278	.191	.414	.408	1										
q13	.452	.392	.409	.391	.350	.349	.331	.310	.243	.151	.308	.242	.574	.605	.467	1									
q15	.494	.488	.435	.407	.419	.421	.416	.334	.305	.213	.359	.198	.565	.611	.452	.732	1								
q62	.332	.287	.327	.263	.318	.188	.317	.341	.321	.241	.337	.174	.297	.235	.409	.302	.300	1							
q69	.313	.308	.294	.278	.347	.280	.320	.351	.328	.231	.425	.198	.257	.248	.272	.334	.394	.535	1						
q70	.334	.324	.317	.256	.302	.249	.313	.347	.365	.204	.369	.179	.272	.268	.300	.317	.354	.635	.712	1					
q78	.369	.345	.356	.279	.323	.334	.331	.350	.371	.127	.332	.237	.369	.358	.348	.380	.401	.337	.350	.367	1				
q79	.463	.381	.413	.394	.419	.377	.413	.326	.340	.135	.459	.229	.366	.377	.385	.466	.474	.258	.367	.344	.681	1			
q80	.415	.371	.346	.350	.373	.315	.366	.381	.337	.195	.360	.311	.362	.365	.341	.360	.381	.290	.378	.308	.416	.540	1		
q82	.405	.384	.356	.278	.375	.387	.372	.324	.340	.224	.395	.235	.299	.304	.236	.324	.394	.261	.379	.320	.423	.568	.602	1	
q85	.375	.383	.324	.250	.403	.315	.290	.412	.302	.312	.453	.239	.264	.355	.280	.313	.333	.234	.347	.266	.369	.533	.516	.568	1

Appendix 2.8

Matrix of Correlations among Institutional Commitment to Ethnic/Racial diversity (Private institutions)

	q24	q25	q27	q39	q40	q41	q42	q72	q73	q74	q75	q76	q12	q14	q11	q13	q15	q62	q69	q70	q78	q79	q80	q82	q85
q24	1																								
q25	.592	1																							
q27	.449	.337	1																						
q39	.437	.383	.288	1																					
q40	.428	.316	.326	.427	1																				
q41	.469	.349	.300	.448	.464	1																			
q42	.441	.368	.339	.508	.459	.491	1																		
q72	.217	.258	.151	.259	.271	.198	.259	1																	
q73	.363	.338	.196	.270	.329	.250	.332	.297	1																
q74	.140	.148	.081	.178	.119	.138	.231	.265	.219	1															
q75	.301	.321	.166	.301	.261	.271	.321	.311	.334	.244	1														
q76	.249	.229	.175	.232	.249	.204	.227	.198	.348	.235	.271	1													
q12	.510	.409	.409	.314	.381	.348	.410	.195	.276	.112	.256	.196	1												
q14	.451	.348	.365	.274	.345	.324	.367	.189	.192	.084	.117	.155	.613	1											
q11	.387	.356	.194	.274	.263	.272	.305	.176	.222	.102	.298	.136	.493	.358	1										
q13	.536	.465	.384	.353	.325	.355	.433	.307	.374	.138	.281	.305	.595	.507	.466	1									
q15	.527	.477	.399	.359	.395	.355	.411	.279	.353	.149	.325	.305	.551	.548	.461	.667	1								
q62	.301	.331	.190	.247	.260	.205	.340	.241	.304	.125	.342	.241	.307	.239	.388	.366	.330	1							
q69	.266	.290	.162	.234	.246	.185	.269	.253	.314	.173	.304	.238	.240	.231	.329	.339	.302	.632	1						
q70	.311	.330	.165	.283	.265	.237	.320	.236	.282	.178	.292	.157	.347	.267	.352	.387	.318	.658	.671	1					
q78	.442	.394	.338	.386	.408	.362	.464	.259	.410	.151	.331	.299	.392	.340	.301	.443	.387	.353	.311	.336	1				
q79	.405	.386	.357	.411	.415	.377	.475	.270	.383	.136	.371	.262	.413	.345	.353	.438	.411	.348	.326	.375	.759	1			
q80	.414	.418	.357	.429	.374	.400	.468	.274	.312	.161	.369	.262	.358	.326	.285	.418	.444	.327	.253	.314	.559	.641	1		
q82	.416	.379	.321	.376	.407	.382	.428	.284	.313	.202	.310	.269	.385	.318	.334	.400	.386	.323	.292	.330	.578	.667	.640	1	
q85	.411	.348	.366	.348	.397	.327	.388	.333	.248	.260	.331	.281	.364	.276	.296	.371	.376	.299	.281	.322	.480	.497	.456	.577	1

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CHAPTER III

EXTENDING NOTIONS OF CAMPUS CLIMATE AND DIVERSITY TO THE TRANSITION TO COLLEGE: EXPERIENCES WITH DIVERSE PEERS AND COLLEGE SENSE OF BELONGING

Introduction

Educating, training, and preparing future leaders for many segments of society continue to be the responsibilities of colleges and universities. This is particularly true for public universities that are state flagship campuses; yet with the changing demographics in the United States, the growth of immigrant populations in many states, and events of September 11, 2001, guarantees of a diverse, pluralistic society remain uncertain without more systematic attention to educating students for such a society. In June 2003, the U.S. Supreme Court's ruling in *Gratz v. Bollinger* struck down the mechanism the University of Michigan had used to achieve a diverse student body among undergraduates but supported the educative value of diversity in this case and *Grutter v. Bollinger*. The Court affirmed the importance of diversity in higher education and reinforced the expectation that elite institutions have a responsibility to train their students to become leaders across all segments of society. Most importantly, these rulings affirmed that the cadre of future leaders should be diverse and that institutional initiatives to educate a diverse student body should reflect the centrality of diversity to key educational goals and outcomes. At the same time, access to higher education continues to be a contested area of U.S. society with regard to admission to flagships and other top tier institutions. Thus, there has been

a renewed focus on a more complex understanding of diversity in relation to student outcomes.

One key college student outcome is the successful transition and retention of diverse students in college. The American Association of Colleges and Universities (AAC&U) has introduced an initiative based on the concept of "inclusive excellence" to guide a national movement and campus efforts to make the success of diverse students a focal point. Specifically, they define inclusive excellence as: (a) a focus on student intellectual and social development; (b) a purposeful development and utilization of organizational resources directed at student learning; (c) attention to the cultural differences that learners bring to the educational experience that enhance the educational enterprise; and (d) a welcoming community that engages all of its diversity in the service of student and organizational learning (AAC&U, 2007). In this perspective, a diversity agenda becomes part of the institution's goals in achieving academic excellence using a student-centered approach. However, institutions require a better understanding of how the campus climate for diversity and intergroup relations play a role in student outcomes. While much of the previous work has been conducted on underrepresented groups or groups who experience some sort of racial isolation on campus (Harper & Hurtado, 2007; Hurtado & Carter, 1997; Hurtado, Milem, Clayton-Pederson, & Allen, 1999), we are only beginning to understand how these factors related to diversity are similar or different for majority students and underrepresented students in their transition to college (Hurtado, Han, Sáenz, Espinosa, Cabrera, & Cerna, 2007).

The purpose of this study is to test a model of students' diversity experiences in predicting the transition to college for White students and students of color. Specifically

we examine the direct and indirect relationships between several measures of interactions with diverse peers before and during college on students' sense of belonging in the second year of college. In testing a similar model, we attempt to determine if affective, behavioral, and perceptual dimensions of the climate for diversity impact students' psychological sense of integration in the same way for White students and students of color attending predominantly white universities (PWIs). The implications for student support may include greater attention to intergroup relations in improving student transition and retention in college.

Background

Despite the wealth of higher education research on college students, higher education scholars and administrators need to continue to work on building better insights into the transition process for students, particularly the challenges students face and appropriate responses of support. Terenzini, Rendón, Upcraft, Millar, Allison, Gregg, and Jalomo (1994) used a combination of Astin's (1993) theory of involvement and Tinto's (1993) college student departure theory to frame their qualitative examination of the transition to college. They note that nontraditional students experience the transition to college not only as an adjustment to a new academic environment, but also as an adjustment to a new social and cultural context. Terenzini et al. (1994) assert that, as part of the transition to college, students must be validated. A key aspect of this validation process is that students feel they are welcome in these new social and cultural contexts. However, the needs of students vary widely, especially for students of color at elite PWIs. Indeed, a growing body of research indicates that students of color who have

negative experiences at PWIs are less likely to persist (Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999; Hurtado, 1992; Nettles & Perna, 1997).

Like all students, students of color experience challenges in making the successful transition to college (Carter, Locks, Winkle-Wagner, & Pineda, 2006; Kalsner & Pistole, 2003); however, they have the added burden of adjusting to college in what they may perceive as a hostile racial climate. Their presence on campus is often scrutinized (Jones, 2002; Solórzano, Ceja, & Yosso, 2001), and their talents and abilities are doubted (Davis, Dias-Bowie, Greenberg, Klukken, Pollio, Thomas, et al., 2004; Steele, 1997, 2004). For White students in the same environments, racial aspects of the environment also have an impact on their transition, but the magnitude of the effect differs (Hurtado et al., 2007). Hurtado, Carter, and Spuler (1996) found variations among Latina/o students involving such strategies as cognitive mapping, managing resources, and reliance on family support/independence as processes affecting students' academic, social, and personal-emotional adjustment, as well as their sense of attachment to the institution. Nora (2001) asserts that assessment of institutional commitment may in fact be a proxy measurement of the level of real and perceived institutional support students receive. Nora, Barlow, and Crisp's (2005) reformulation of the integration model includes many recent developments in retention research that more appropriately includes research on underrepresented students and also includes students' sense of belonging, the outcome of interest for this study.

The broader literature on college students frames the transition to college phenomena as a psychological adjustment process. These approaches focus on the individual student's psychological processes and traits rather than context, including

factors such as coping, self-efficacy, attachment, and motivation. Students with an optimistic outlook, strong locus of control, high self-esteem, and proactive orientation toward seeking social support find the adjustment to college to be a smoother process (Aspinwall & Taylor, 1992; Bettencourt, Charlton, Eubanks, Kernahan, & Fuller, 1999; Protinsky & Gilkey, 1996; Shields, 2004). For students of color, racial and ethnic identity (Adan & Felner, 1995; Hatter & Ottens, 1998; Saylor & Aries, 1999), community involvement, and the negotiation of family support and relationships (Choi, 2002; Schneider & Ward, 2003) are key aspects of the transition-to-college process, indicating that social connections and context are important.

Previous Research

Sense of Belonging in College

Perceived social cohesion (Bollen & Hoyle, 1990), more commonly referred to as "sense of belonging" in the college student literature, has been identified as a key outcome of college students' experiences with academic and social integration on campus. Sense of belonging, in turn, also affects students' intention to persist (Hausmann, Schofield, & Woods, 2007). Researchers have typically conceived of sense of belonging as part of the psychosocial processes involved with the adjustment and transition to college. Different types of social and academic interactions (e.g. memberships, specific peer interactions on campus) affect a students' sense of belonging. For example, Hurtado and Carter (1997) found that Latina/o students who interacted with peers around academic (i.e., course-related) issues outside of class had a higher overall sense of belonging. In the Hurtado and Carter study, the sense of belonging measure was a latent factor consisting of the extent to which students felt they were "part of the

campus community", "member of the campus community," and had a "sense of belonging to campus community." A similar measure was used in Hausmann, Schofield, and Woods (2007), both of which were based on Bollen and Hoyle's (1990) measure of social cohesion.

Hoffman, Richmond, Morrow, and Salomone (2002), based on qualitative work, conceived of "perceived peer support" as one of five factors that can be used to measure college students' sense of belonging. However, direct tests of a sense of belonging measure in complex models that study relationships with peer support reveal that the two are distinct constructs that are strongly related in the experiences of White students and students of color (Hausmann et al., 2007; Hurtado et al., 2007). In a growth model, researchers found changes in students' sense of belonging and the effect of peer support, with such peer support being more important for increasing African Americans' sense of belonging over time (Hausmann et al., 2007).

A student's sense of belonging can also mediate the relationships between parental support and perceptions of a hostile racial climate, particularly for students of color (Mounts, 2004). This finding may explain Hurtado and Ponjuan's (2005) finding that Latina/o students living at home and those living on campus did not differ in making a successful adjustment to college. Other scholars have found that students who have positive, race-related interactions and experiences feel a greater sense of belonging on campus (Mendoza-Denton, Downey, Purdie, Davis, & Peitrzak, 2002). This finding is consistent for African Americans (Mendoza-Denton et al., 2002), Asian Americans (Lee & Davis, 2000), and Latina/os (Hurtado & Carter, 1997).

Researchers are beginning to conclude that early social experiences in college are better determinants of "initial levels of sense of belonging than are demographic or academic experiences" (Hausmann et al., 2007, p. 829). Our study extends this work by examining how students' sense of belonging is affected by the quality of peer relationships associated with diversity on campus for White students and students of color.

Pre-college Experiences and Interacting with Diverse Peers in College

Early social experiences in college are influenced by the students' experiences prior to college as well as by their experiences with different racial/ethnic groups in college. Allport's (1954) contact hypothesis clearly outlines the conditions necessary to foster the positive effects of intergroup contact. The equal-group-status condition he recommends may be difficult for college campuses to achieve, given persistent social and economic disparities among racial/ethnic groups in their pre-college environments. Students' pre-college backgrounds, whether they have interacted with homogeneous peers or diverse peers, may be predisposed to continue the same interaction patterns in college (Sáenz, 2005; Sáenz, Ngai, & Hurtado, 2007). Initiatives like intergroup relations programs provide students opportunities to develop common goals, a second condition of Allport's contact hypothesis (Zúñiga, Nagda, Chesler, & Cytron-Walker, 2007). The condition for sanctioned authority support speaks to how important it is that opportunities to interact across social identity memberships are provided through formal programs on campuses. Interactions across racial and ethnic boundaries can facilitate mutual liking and respect if such interactions are deliberate and structured to be more than superficial encounters. These conditions are especially important for today's college students, who

are educated in increasingly segregated K-12 environments (Orfield, Bachmeier, James, & Eitle, 1997; Orfield & Lee, 2006).

Actual reports of the quality of interactions students have with diverse peers and the degree of intergroup anxiety they have with particular racial groups are central to student outcomes (Gurin, Dey, Hurtado, & Dey, 2002; Hurtado, 2003a) and sense of belonging, in particular, in the transition to college (Hurtado et al., 2007). Stephan and Stephan (1989) examined anxiety as a mediating factor for intergroup contact and found that students of color experienced a greater degree of anxiety when interacting with Whites, and that such anxiety over intergroup interactions is fear based. These fears of negative consequences are based on prior interactions, prior impressions, and the context of the interactions. Other research by Stephan and Stephan (1996) has shown that an increase or decrease in anxiety is dependent on the type of intergroup contact experienced.

Accentuation theory posits that students enter colleges with predispositions that are accentuated over time as they select peer groups and activities; they are also likely to select courses that reinforce these initial predispositions (Feldman & Newcomb, 1969; Nelson-Laird, Engberg, & Hurtado, 2005). The consistent findings about how participation in the Greek system isolates White students from interacting with their diverse peers is one such example (Chang & DeAngelo, 2002; Sáenz, Ngai, & Hurtado, 2007; Sidanius, Levin, Van Laar, & Sinclair, 2004). With diversity, such accentuation effects are likely to be powerful, as those students who are already comfortable with diversity and consider themselves strong in this area will select courses, peers, and activities that will strengthen their initial inclinations. Students' predispositions are likely

to be accentuated over time, and these tend to accentuate group differences in interests, values, and behaviors. Moreover, recent research has shown the extent to which students' pre-college racial environments influence student interaction in college (Sáenz, 2005; Sáenz et al., 2007). Thus, it is important to account for students' predispositions regarding diversity activities and any differences in the racial demographics of schools and neighborhoods as influences on students' interactions with diverse peers in college, which in turn, have been demonstrated to produce a host of educational outcomes that constitute desired skills and competencies in a multicultural society (Gurin et al., 2002; Hurtado, 2003a; Milem, Chang, & Antonio, 2005).

Campus Climate and Racial Tension

Research has shown that students of color are attuned to the campus racial environment and experience the college environments differently than their White counterparts at PWIs. Hurtado, Milem, Clayton-Pederson, and Allen (1999) summarize the research on diversity in higher education and identify four interrelated aspects of the campus climate. Most of the empirical research reviewed for this analysis can be categorized as psychological and behavioral dimensions of the climate for diversity. Educational researchers have consistently identified these areas as barriers to the academic success, retention, and graduation of minority students.

Institutional climate and commitment are evidenced by academic, social, and financial support (Freeman, 1997; Green, 2001; Hurtado et al., 1999). At times, institutions may ignore the fact that these levels of support are affected by campus racial dynamics. However, perceptions of a poor racial campus climate can have a negative effect on students' ties to the academic and social arenas of college life (Sáenz,

Marcoulides, Junn, & Young, 1999). Morley (2003) found that two elements affecting African American students' adjustment to college were pressure from White students to disclose their racial background, encountering a negative reaction to their minority status, and encountering colorblind ideologies. A poor climate and repeated experiences with disrespectful actions by their peers and the institution lowers African Americans students' investment in remaining at their institution (Solórzano et al., 2001; Zea, Reisen, & Beil, 1997). However, perceptions of a hostile climate affect students from many different racial/ethnic groups and majors in the transition to college (Cabrera et al., 1999; Hurtado et al., 1999; Hurtado et al., 2007).

Structural Model and Hypotheses

This study combines a number of conceptual frames of reference relevant to understanding the relationship between interactions with diverse peers and the transition to college. Our hypothesized model builds on previous scholarship on college transition and students' sense of belonging in college. In particular, we adapted constructs from previous models on diverse students, campus climate, integration, and transition to college (Cabrera et al., 1999; Hurtado & Carter, 1997; Hurtado et al., 1999; Nora et al., 2005). We examine perceptions of the racial climate, accounted for in previous models. Additionally, we consider predispositions toward interactions with diverse peers, the nature of contact with diverse peers based on Allport's (1954) contact hypothesis, and accentuation theory based on the work of Feldman and Newcomb (1969). Based on previous research, we control for gender differences in predicting sense of belonging and activities that influence college involvement, such as living in college residences and hours per week spent socializing (Milem & Umbach, 2003; Pike, 2002).

Many predominantly White, flagship institutions are becoming increasingly diverse, but many of the students enrolling on such campuses are coming from homogeneous environments due to persistent racial segregation in housing and education (Orfield et al., 1997; Orfield & Lee, 2006). We anticipate that, as findings by Sáenz, Ngai, and Hurtado (2007) suggest, higher proportions of Whites in the pre-college neighborhood, peer group, and high school will have a negative effect on students' reporting that they have had positive interactions with diverse peers in college. Further, it is probable that this relationship will be stronger for students of color than for White students. We expect that larger numbers of Whites in the pre-college environment will have opposite effects for White students and students of color. We predict that White students who are coming from predominantly White backgrounds will be less likely to indicate a predisposition to participate in diversity activities at the beginning of college. We think that the opposite will be true for students of color, who, we hypothesize, will be more comfortable with diverse peers and possibly will seek out diversity activities and other students of color on campus.

Based on the outcomes of participating in programs like intergroup relations and taking courses related to diversity, our conceptual model predicts that students of color and White students will be more likely to have positive interactions with diverse peers if they indicate they are likely to participate in diversity activities in college. These students who have a predisposition towards participating in college diversity activities, we think, will increase their opportunities for positive interactions with a diverse set of peers. We anticipate that this effect will be strongest for students of color who are more likely to be exposed to diverse peers (Rowley, 2000).

We posit that students who are predisposed to participate in diversity activities are likely to have a unique set of multicultural competencies that not only spur an interest in participating in diverse activities but that also decrease their anxiety with diverse peers. We expect that these students have developed a heightened sense of awareness about cultural and racial differences and are more sensitive to any resulting racial tensions on their campuses.

We anticipate several direct and indirect effects on sense of belonging. Higher education literature gives strong indications that the campus social environment and peer relationships are critically important for transition to college and academic success (Astin, 1993; Tinto, 1993). Further, there is a growing body of research that this situation is especially pronounced for students of color (Antonio, 2004; Hausmann et al., 2007; Hurtado et al., 2007; Rendón, Jalomo, & Nora, 2000; Tierney, 1992). We hypothesize that positive interactions with diverse peers will have a direct, positive effect on sense of belonging and an indirect effect on sense of belonging mediated by the perception of racial tension on campus. Additionally, we anticipate that perceived racial tension will have a negative, direct effect on sense of belonging (Hurtado & Carter, 1997).

Methods

Data Source

Data are derived from a national, multi-institutional research project titled Preparing College Students for a Diverse Democracy (Hurtado, 2003a). Ten public universities participated in the study; each was chosen for its strong commitment to diversity, recent success in diversifying its student body, and/or substantial engagement in community-building activities. The longitudinal surveys, administered in 2000 (at the

beginning of the first year of college) and 2002 (at the end of the second year of college), examined students' attitudes and experiences on a variety of issues with a focus on issues related to diversity and civic engagement. A survey distribution method was deemed most appropriate for each participating campus after consulting with the institutions. Three campuses administered the survey during its summer orientation sessions; four campuses mailed the survey to its incoming students, sending a second wave of surveys to those who did not respond; and three campuses distributed the surveys to students taking freshman seminar and English composition classes. The average response rate for the 10 institutions was approximately 35%, ranging from a high of 81% to a low of 12%. A follow-up survey was mailed in 2002 to all second-year students near the end of their second year of college. Due to low second-year response rates for one institution, one campus was eliminated from the sample. We include students who completed both the baseline and the follow-up in this study—a total of 4,471 students.

Sample

For this study, we randomly selected a sub-sample of students for analysis. As suggested by researchers (Bentler, 2006; Bollen, 1989), we divided the sample in half to perform preliminary analyses on one (N = 1,112) and confirmatory analyses on the other (N = 1,234). In the unweighted sample, 69% of participants were White, 17% were Asian American/Pacific Islander, 8% were Hispanic/Latina/o/Chicano, 4% were African American/Black, 1% were American Indian/Alaskan Native, and 67% of the sample was female.

Missing Data Analysis

In social science empirical research, it is important to address the issue of missing data in quantitative studies. Researchers have used missing data techniques such as multiple imputation or EM algorithm to replace data. For this study, we utilized EM algorithms to replace missing data. To maintain statistical power, we replaced missing values for all independent variables using the EM algorithm. The EM algorithm represents a general method for obtaining maximum likelihood (ML) estimates when a small proportion of the data is missing (Dempster, Laird, & Rubin, 1977, cited in Allison, 2002; McLachlan & Krishnan, 1997). Less than 10% of the cases for the variables included in this study had missing data.

The EM algorithm consists of two steps--an expectation step, and a maximization step--that are repeated multiple times in an iterative process that eventually converges to the ML estimates. Unlike conventional regression imputation, in which decisions must be made on which variables to use as predictors, the EM algorithm starts with a full covariance matrix and uses all available variables as predictors for imputing missing data.

Weights

We created weights using the characteristics of each institution's first-year student population to correct for possible sources of response bias and to approximate the total first-year population for each campus. We requested electronic data from each institution on its population of first-year students so that we could develop the weights for their campus. We used the same weighting technique for all of the institutions.

To ensure that the weighted sample did not produce incorrect standard errors and inflated t-statistics results due to a large weighted sample size, we created an adjusted

weight variable. This adjusted weight variable is the final total weight variable divided by the mean of the final total weight variable for all groups. This adjustment ensures that the weighted sample will closely match the original sample size, yet still yield a sample that proportionally corrects for non-response across the sample.

Main Dependent Variable

The primary outcome measure in the model was a latent factor that represented students' sense of belonging to the university. This factor was indicated by three items (e.g., "I see myself as a part of the university community"), each of which was scored on a four-point Likert scale (1 = "strongly disagree" to 4 = "strongly agree"). Means and standard deviations for all variables in the model are shown in Table 1 for separate samples of White students and students of color along with tests of significant group differences. (Correlation matrices are available upon request).

Endogenous Variables

Excluding the primary dependent measure, we used four endogenous variables or factors in the model. First, previous studies have shown that perceptions of racial tension influence students' sense of belonging. We measured this construct with a single item ("there is a lot of racial tension on the University campus"), which was scored on a four-point Likert scale (1 = "strongly disagree" to 4 = "strongly agree"). To adjust for the unreliability of the observed variable, we created a single-item factor.

Second, we also hypothesized that the frequency of positive interactions with diverse peers was related to the student's sense of belonging. We parceled the six items that measured this construct into three groups of two items; each parcel was the mean of the two measures that comprised it. Items were grouped together based on factor loadings

from preliminary analyses (i.e., the item with the highest loading was paired with the item with the lowest loading, etc.; see Bandalos, 2002). The items asked students how often they interacted with peers from a different racial or ethnic group (e.g., "had intellectual discussions outside of class," "socialized or partied") and were measured with a five-point Likert scale (1 = "never" to 5 = "very often").

Third, we also included the frequency of anxious interactions with diverse peers in the model. This variable was the mean of several items that asked how often the student "felt uncomfortable in a situation with a person or a group of people" from a particular racial/ethnic group. For example, if the respondent was Asian American, this variable would be the mean of the self-reported frequency of anxious interactions with African Americans/Blacks, with Whites/Caucasians, with Hispanics/Latina/os/Chicanos, and with American Indians/Alaskan Natives.

Fourth, we created a factor that reflected students' predisposition to participate in diversity-related activities in college. Each of the three items that indicated this factor asked students how likely they were to engage in various activities in college (e.g., "join an organization that promotes cultural diversity") and was scored on a four-point Likert scale (1 = "very unlikely" to 4 = "very likely"). Table 2 contains all of the latent factors in the model with their loadings and alpha reliabilities.

Exogenous Variables

One of the exogenous measures was a three-item factor that gauged the diversity in students' pre-college environment, based on the level of segregation in their neighborhood and school (Orfield et al., 1997; Orfield et al., 2006). More specifically, the three items inquired about the demographics in the neighborhood where students grew

Table 3.1 ***Means and Standard Deviations of Diversity and Transition Variables by Entire Sample, Whites, and Students of Color***

	White Students			Students of Color			Group Comparison		
Variables and Factors	**Mean**	**SD**	**n**	**Mean**	**SD**	**n**	***t***	**df**	***p***
Proportion of Whites in pre-college environments [a]									
Racial composition of neighborhood grew up in	4.22	.89	849	3.35	1.26	374	-13.741	1221	***
Racial composition of high school	3.88	.91	848	3.15	1.09	370	-12.117	1216	***
Racial composition of friends in high school	4.06	.85	848	2.91	1.14	371	-19.490	1217	***
Pre-college predisposition to participate in diversity activities [b]									
Participate in activities of my own culture in college	2.07	.87	846	2.83	.87	371	13.946	1215	***
Take diversity course first year of college	2.16	.89	845	2.37	.92	370	3.646	1213	***
Join cultural diversity organization in college	2.23	.77	840	2.59	.88	371	7.314	1209	***
Positive interactions with diverse peers in college [c]									
Discussed/studied with diverse peers	3.18	1.09	812	3.60	.98	357	9.325	1167	***
Talked honestly about race with diverse peers	2.93	1.07	822	3.34	1.06	361	6.102	1181	***
Dined/socialized with diverse peers	3.47	.99	821	3.89	1.03	361	6.598	1180	***
Anxiety interacting with diverse peers in college [d]	1.67	.64	803	1.69	.60	354	.469	1155	NS
Hours per week socializing with other students [e]	4.08	1.43	820	3.82	1.46	361	-2.872	1179	**
Lived with parent(s) (0=No, 1=Yes)	0.13	.33	803	0.21	.41	356	3.850	1157	***
Gender (1=Male, 2=Female)	1.68	.47	856	1.66	.47	378	-.568	1232	NS
Perceived racial tension on campus [f]	1.69	.72	815	1.81	.77	359	2.478	1172	*
Sense of belonging [f]									
I see myself as a part of the university community	2.98	.84	815	3.01	.81	357	.617	1170	NS
I feel a sense of belonging to this university	2.93	.86	816	2.88	.87	358	-.902	1172	NS
I feel that I am a member of the University community	2.99	.87	817	2.97	.86	358	-.500	1173	NS

*p<.05, **p<.01, ***p<.001

[a] Five-point scale: From All People of Color = 1 to All White = 5.

[b] Four-point scale: From Very Unlikely = 1 to Very Likely = 4.

[c] Five-point scale: From Never = 1 to Very Often = 5.

[d] Four-point scale: From Often = 1 to Never = 4. Coded so anxiety with diverse groups different from their own was captured.

[e] 1 = 0 hours, 2 = 1-5 hours, 3 = 6-10 hours, 4 = 11-15 hours, 5 = 16-20 hours, 6 = Over 20 hours.

[f] Four-point scale: From Strongly Disagree = 1 to Strongly Agree = 4.

up, in the high school from which they graduated, and of their friends in high school (1 = "all or nearly all people of color" to 5 = "all or nearly all White"). The remaining variables--all of which were single-item observed variables--served as controls for the other variables in the model. One dummy variable reflected whether students lived with their parents in their second year of college. Another dichotomous variable measured students' gender (1 = male, 2 = female). To control for students' feeling typically comfortable in social environments, another variable gauged the number of hours that students socialized each week (1 = 0 hours, 2 = 1-5 hours, 3 = 6-10 hours, 4 = 11-15 hours, 5 = 16-20 hours, 6 = over 20 hours).

Table 3.2 ***Factor Loadings and Reliabilities for Independent Variables*** **(n=1234)**

Factor Scales and Item Wording	*(alpha)* Factor Loading
Proportion of Whites in pre-college environments [a]	*(.853)*
Racial composition of friends in high school	.843
Racial composition of high school	.826
Racial composition of neighborhood grew up in	.768
Pre-college predisposition to participate in diversity activities in college [b]	*(.670)*
Join cultural diversity organization in college	.773
Take diversity course first year of college	.589
Participate in activities of my own culture in college	.565
Positive interactions with diverse peers in college [c]	*(.884)*
Had intellectual discussions outside of class	.823
Shared personal feelings and problems	.806
Dined or shared a meal	.763
Socialized or partied	.715
Had meaningful and honest discussions about race/ethnic relations outside of class	.693
Studied or prepared for class	.693
Sense of belonging [d]	*(.909)*
I feel that I am a member of the University community	.981
I see myself as part of the university community	.837
I feel a sense of belonging to this university	.819

[a] Five-point scale: From All People of Color = 1 to All White = 5.
[b] Four-point scale: From Very Unlikely = 1 to Very Likely = 4.
[c] Five-point scale: From Never = 1 to Very Often = 5.
[d] Four-point scale: From Strongly Disagree = 1 to Strongly Agree = 4.

Groups

We used a dummy-coded variable for race (1 = White, 0 = person of color) for subgroup analyses and selected two groups for analyses. Asian American/Pacific Islanders, Hispanic/Latina/o/Chicanos, African American/Blacks, and American Indian/Alaskan Native were included in the students of color group.

Analyses

We conducted structural equation modeling (SEM) analyses, analyzing the covariance matrix of the data using the SEM software EQS Version 6.1 (hereafter EQS). Approximately 50% of the sample was randomly selected to perform exploratory analyses and to make modifications to the structural model (n = 1,122). We performed Cronbach's alpha reliability estimates on each group of items that we hypothesized would measure latent factors. The alphas in this model ranged from .67 to .91 with a median of .87. (See Table 3.2.)

Latent factors were confirmed in the next step of estimating a measurement model. We computed a measurement model that utilized all of the latent factors, the indicators for those factors, and the observed variable that measured the frequency of anxious interactions with peers from different racial/ethnic groups. We included this observed variable because it is an important part of the theoretical framework, unlike gender or number of hours socializing per week, which served as controls in the structural model. Next, based on previous research, we constructed a structural model to test the specific relationships among the constructs.

Based on EQS recommendations, we made several changes to improve the fit of the model to the data. Only changes that were reasonably large ($\chi^2 > 11$) and could be

justified theoretically were made to the structural model. After these changes, we also tested a second structural model using subgroup analyses (students of color versus White students). Initially, all paths were constrained to be identical across subgroups. Based on recommendations from EQS, we removed the constraints on three of these paths one by one, analyzing the change in χ^2 to determine whether freeing each of the paths resulted in a statistically significant improvement in the model (Loehlin, 1998).

To ensure that these analyses did not capitalize on chance variation, we created an additional random sample from the remaining cases in the dataset to perform confirmatory analyses of the structural model (n = 1,234 weighted cases: 856 White, 378 people of color). All of the results in the following section are from these confirmatory analyses. We used the same procedure on this sample, except that no changes were made to the structural model.

Results

Mean Differences between Students of Color and White Students

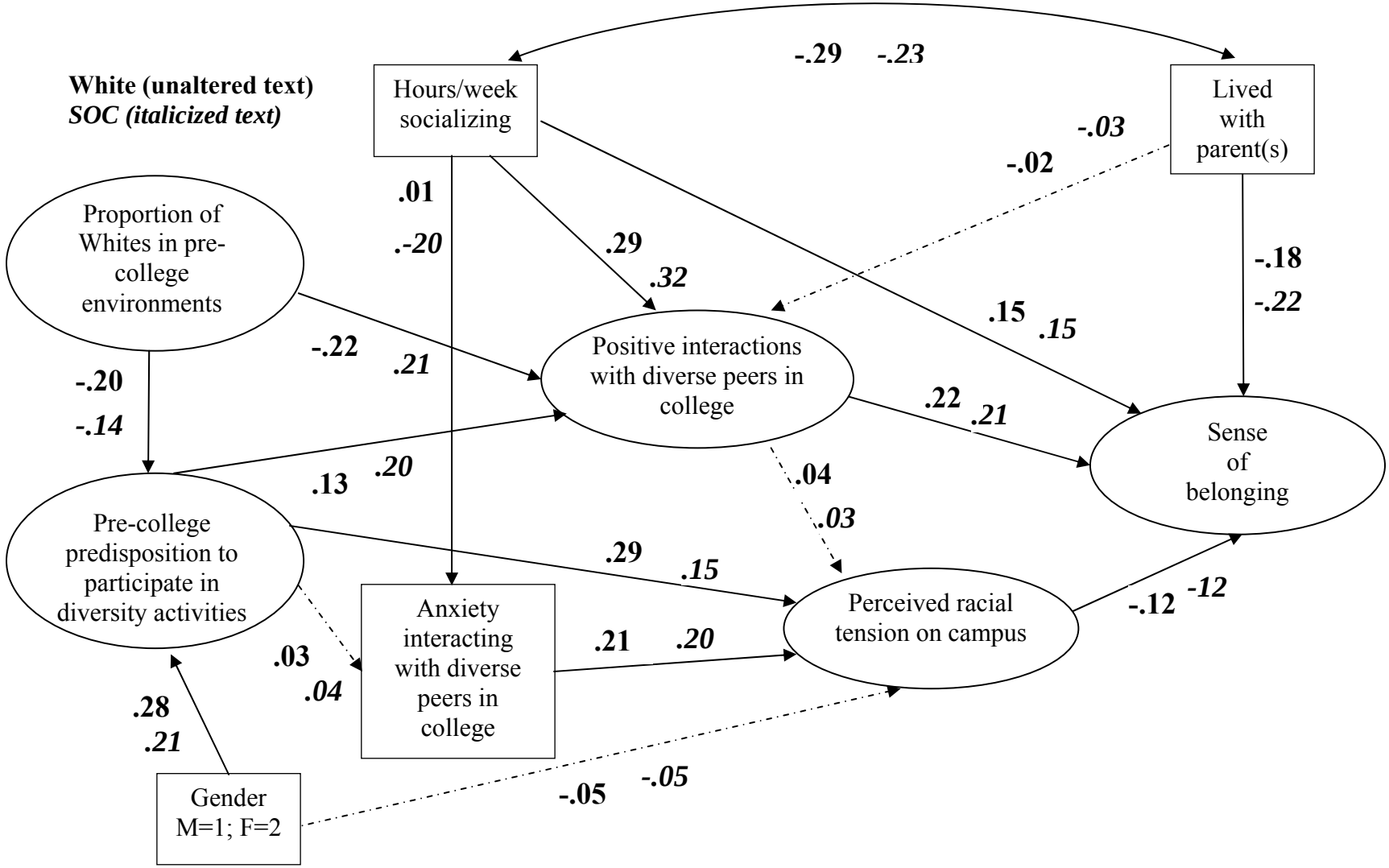
Between-subjects t-tests showed that students of color are more likely than White students to have greater pre-college exposure to people of color (all *p*'s < .001), to have a greater predisposition to engage in diversity-related activities in college (all *p*'s < .001), to have positive interactions with diverse peers (all *p*'s < .001), to perceive more racial tension on campus ($p < .02$), to spend less time socializing ($p < .005$), and to live with their parents in their second year of college ($p < .005$). (See Table 1.) However, it is interesting to note that there are no significant differences between students of color and Whites in the frequency of anxious interactions across race/ethnicity and in their sense of belonging in the second year of college

Structural Equation Model

As expected with a sample of this size, the Chi-square statistic was relatively large: $\chi^2(56) = 163.646$, $p < .001$. However, all other indicators of the fit for the measurement model were more than satisfactory: Bentler-Bonett's normed fit index (NFI) = .972, non-normed fit index (NNFI) = .974, comparative fit index (CFI) = .982, root mean squared error of approximation (RMSEA) = .042, and the ratio of Chi-square to degrees of freedom (χ^2/df) = 2.92. The fit of the structural model was also more than adequate: NFI = .947, NNFI = .953, CFI = .963, RMSEA = .044. Again, as expected, the Chi-square statistic was large in absolute terms ($\chi^2(107) = 332.019$, $p < .001$); but the ratio of Chi-square to degrees of freedom, which is generally considered the better indicator of goodness of fit, was fairly low (χ^2/df = 3.10). For the most part, these findings were consistent with those from the exploratory dataset.

The primary model of interest was the group comparison model, since our basic interest is whether the race climate and interracial contact play the same role for White students as it does for students of color in their sense of belonging. As the strongest test of this question, we constrained all paths to be equal. However, the removal of three paths yielded a significant improvement in the model: $p < .05$. Based on our theoretical predictions, as well as recommendations made by statistical indicators, released paths included those from (a) proportion of Whites in pre-college environments to positive interactions with diverse peers at college; (b) hours per week socializing to anxiety interacting with diverse peers in college; and (c) pre-college predisposition to participate in diversity activities to perceived racial tension on campus. All of the goodness of fit indicators for this final model are adequate, and some were quite good: NFI = .904, NNFI

Figure 3.1 ***Final Structural Equation Model for College Diversity Experiences and Sense of Belonging Group Comparison***



The relationship between diversity experiences and sense of belonging for White students and students of color (SOC). Structural model (Group comparison) NFI = .904, NNFI = .930, CFI = .939, RMSEA = .038, X^2/df = 2.55. Non-significant coefficients are indicated with a dotted path. Disturbances, errors, and observed variables used to create latent constructs are not shown in this figure.

= .930, CFI = .939, RMSEA = .038, χ^2/df = 2.55. The final group, partially constrained model is shown in Figure 3.1, summarizing the standardized direct effects (parameter estimates) for both White students and students of color structural models. Unless otherwise specified, many of the relationships are identical for both groups and all *p*'s < .05. A dotted path indicates the lack of significant coefficients for a hypothesized path.

Direct Effects

A higher sense of belonging in the second year of college is evident among all students who had frequent positive interactions with diverse peers. Consistent with this finding, perceptions of racial tension had a negative impact on sense of belonging for both White students and students of color. Further, as we might expect, students who spent more time socializing were likely to have a higher sense of belonging. In contrast, students who had lived with their parents in the first year of college were likely to have a lower sense of belonging by the second year of college and spent less time socializing, as indicated by the negative correlation between these two variables.

Students' positive interactions with diverse peers were strongly associated with the number of hours per week spent socializing. However, exposure to a higher proportion of Whites in the pre-college environment and positive interactions with diverse peers varied across groups such that the relationship is negative for White students and positive for students of color. This indicates that White students who grew up in predominantly White environments have fewer positive interactions in college than those who grew up in more diverse environments. For underrepresented students of color, early exposure to living in a White environment leads to positive cross-racial interactions in college. Greater anxiety about interacting with various groups affects perceived racial

Table 3.3 ***Direct and Indirect Effects of Diversity Experiences and Sense of Belonging***

	Students of Color (n=378)			*White Students (n=856)*		
Direct effects	***b***	***B***	***R^2***	***b***	***B***	***R^2***
Anxiety interacting with diverse peers in college			.042			.001
Pre-college predisposition to participate in diversity activities	.039	.040		.039	.029	
Hours per week socializing	-.085***	-.201		.004	.010	
Pre-college predispositions to participate in diversity activities			.063			.117
Proportion of Whites in pre-college environments	-.117***	-.141		-.117***	-.201	
Gender	.261***	.207		.261***	.277	
Positive interactions with diverse peers in college			.178			.167
Proportion of Whites in pre-college environments	.217**	.209		-.237***	-.218	
Pre-college predisposition to participate in diversity activities	.248***	.198		.248***	.133	
Hours per week socializing	.175***	.320		.175***	.293	
Lived with parent(s)	-.055	-.028		-.055	-.022	
Perceived racial tension on campus			.066			.131
Pre-college predisposition to participate in diversity activities	.179*	.154		.450***	.292	
Positive interactions with diverse peers in college	.030	.033		.030	.037	
Anxiety interacting with diverse peers in college	.237***	.198		.237***	.206	
Gender	-.071	-.049		-.071	-.049	
Sense of belonging			.173			.154
Positive interactions with diverse peers in college	.203***	.208		.203***	.220	
Perceived racial tension on campus	-.130***	-.124		-.130***	-.116	
Hours per week socializing	.081***	.152		.081***	.147	
Lived with parent(s)	-.427***	-.218		-.427***	-.181	

*p<.05, **p<.01, ***p<.001

Note: All paths were constrained to be equal across groups with exceptions noted by differences in unstandardized coefficients (freely estimated paths).

Table 3.3 (continued) ***Direct and Indirect Effects of Diversity Experiences and Sense of Belonging***

	Students of Color (n=378)		*White Students (n=856)*	
Indirect effects	***b***	***B***	***b***	***B***
Anxiety interacting with diverse peers in college				
Proportion of Whites in pre-college environments	-.005	-.006	-.005	-.006
Gender	.010	.008	.010	.008
Positive interactions with diverse peers in college				
Proportion of Whites in pre-college environments	-.029**	-.028	-.029**	-.027
Gender	.065***	.041	.065***	.037
Perceived racial tension on campus				
Proportion of Whites in pre-college environments	-.016	-.017	-.062***	-.069
Pre-college predisposition to participate in diversity activities	.017	.014	.017	.011
Anxiety interacting with diverse peers in college	-.015	-.029	.006	.013
Lived with parent(s)	-.002	-.001	-.002	-.001
Gender	.051*	.035	.122***	.084
Sense of belonging				
Proportion of Whites in pre-college environments	.040**	.040	-.046***	-.046
Pre-college predisposition to participate in diversity activities	.025	.020	-.010	-.006
Positive interactions with diverse peers in college	-.004	-.004	-.004	-.004
Hours per week socializing	.037***	.070	.035***	.063
Anxiety interacting with diverse peers in college	-.031***	-.025	-.031***	-.024
Lived with parent(s)	-.011	-.006	-.011	-.005
Gender	.016*	.010	.007	.004

*p<.05, **p<.01, ***p<.001

Note: All paths were constrained to be equal across groups with exceptions noted by differences in unstandardized coefficients (freely estimated paths).

tension across both groups. Once this anxiety is controlled, the quality of students' interactions are not associated with perceptions of racial tension.

Having a greater pre-college predisposition to engage in diversity activities is associated with greater perceived racial tension, especially for White students, indicating that students may be more critical of the racial climate. Figure 3.1 also shows the significant correlation indicating that students who lived with their parents were less likely to spend a large amount of time socializing on campus. Parameter estimates for both direct and indirect effects for students of color and White students are summarized in Table 3.3.

Indirect Effects

Students' hours per week spent socializing have a positive indirect effect on sense of belonging, mediated by students' positive interactions with diverse peers. Anxiety about interacting with diverse peers, in contrast, has a negative indirect effect on students' sense of belonging, mediated by perceptions of racial tension on campus. The proportion of Whites in the pre-college environment has an indirect relationship on students' sense of belonging, one which is negative for White students and positive for students of color. It is interesting to note that this pre-college variable has a negative indirect relationship on perceptions of racial tension, mediated by predisposition to engage in diversity activities. This finding indicates that perceptions of racial tension were generally lower among both White and students of color who grew up in predominantly White pre-college environments, once one accounts for their predisposition to participate in diversity activities. However, the indirect effects also

indicate that growing up in a predominantly White environment can also result in fewer positive interactions with diverse peers.

Other significant indirect relationships are also of interest. Women were more likely to perceive racial tension, mediated by their strong predisposition to participate in diversity activities. This was especially true for White women. Women of color were slightly more likely than men to have a higher sense of belonging in college.

Discussion

These findings provide a more nuanced portrait of racial dynamics in the college environment that lead to students' sense of belonging in the early years of college. The study employed a strong test of whether aspects of these dynamics operate in a similar manner for White students and students of color. Positive interactions with diverse peers result in a greater sense of belonging to one's college or university. It is worth noting that this relationship held even when the amount of time spent socializing was controlled. In fact, positive interactions with diverse peers have a stronger effect on sense of belonging than the total amount of time students spend socializing. Thus, to feel a sense of belonging, it is not only important to interact frequently with one's peers but also to engage with a diverse range of peers in a substantive manner. This finding is consistent with previous research emphasizing that the quality of interactions with diverse peers--not merely the presence of diverse peers--is important (e.g., Chang, Denson, Sáenz, & Misa, 2006; Gurin et al., 2002; Hurtado, 2003a; Sáenz, Ngai, & Hurtado, 2007). This study affirmed the importance of such interactions on the sense of belonging in college for both White students and students of color.

This model also replicated two previous findings. First, perceived racial tension leads to a reduced sense of belonging on campus (Cabrera et al., 1999; Hurtado et al., 2007). Second, living with one's parents also leads to a reduced sense of belonging for both White students and students of color. However, some recent evidence suggests that this may not be the case for Latina/o students (Hurtado & Ponjuan, 2005); given that all students of color were analyzed as one group, this relationship for specific ethnic groups will have to be determined in future research.

Some of the indirect effects of pre-college experiences and predispositions on sense of belonging add to our understanding of the racial dynamics and student outcomes. The relationship between the proportion of Whites in the pre-college environment and the frequency of positive interactions with diverse peers worked differently for Whites and students of color. This difference can probably be attributed to differences in who constitutes "diverse peers" (i.e., those from a different racial/ethnic background) for the two groups. White students who grew up in mostly White neighborhoods probably did not have much experience interacting with peers of color before college and find it more difficult to have positive interactions. Therefore, they are also less likely to interact with students of color in college than are White students who previously lived in more diverse areas. However, students of color who lived in mostly White neighborhoods probably had a great deal of experience interacting with those from different racial/ethnic backgrounds, since the majority of their peers were White.

For indirect effects on the sense of belonging, this study found that White students who grew up with racially and ethnically diverse peers were more likely to interact with such peers in college and thereby had a greater sense of belonging. Students of color who

interacted with diverse (White) peers were also more likely to do so in college and thereby had a greater sense of belonging at PWIs. Given the high level of residential segregation in the United States (Orfield et al., 1997; Orfield & Lee, 2006), students from all racial/ethnic backgrounds are often exposed to greater structural diversity in college than in their high schools and neighborhoods. Those students who have greater experience with diversity before college are more likely to embrace it during college, thus leading to a greater sense of belonging.

The relationship between the effect of pre-college disposition and perceived racial tension was in the expected direction, but the strength of the relationship diverged from the hypotheses in that the relationship was stronger for White students. One possible explanation is that White students who initially plan to participate in diversity-related activities expect more and may be disappointed with intergroup relations on campus. Therefore, when these students form their judgments about the campus racial climate, they are likely to report racial tension as a problem. Using the perspective of Feldman and Newcomb's (1969) accentuation hypothesis, it makes sense that White students who are predisposed to engage in diversity activities are especially likely to engage in more positive interactions with diverse peers but also more likely to *perceive* racial tension on their campus than other White students. Therefore, a predisposition toward diversity can be beneficial when it enhances interactions across groups but potentially disappointing for students when campus conditions are not ideal for intergroup contact.

Contrary to one of our hypotheses, the relationship between positive interactions with diverse peers and perceived racial tension was not supported. In one of the most commonly cited works in social psychology, Allport's (1954) contact hypothesis states

that interactions across racial and ethnic boundaries can facilitate mutual liking and respect under certain conditions. Using this assumption, colleges and universities often attempt to foster interactions across difference in an effort to promote a number of outcomes, including the reduction of racial tension. We believe that our finding was a result of controlling for students' affective sense of anxiety in interacting with diverse groups. Such anxiety also had a depressing effect on students' sense of belonging, as evidenced by indirect effects for both groups. Therefore, a reduction of intergroup anxiety is key to reducing perceptions of racial tension and producing improvements in students' sense of belonging. This study has implications for campus climate research in that it underscores the affective dimension of perceived racial tension that can affect important student outcomes like students' sense of belonging and their successful transition to college. However, a practical challenge remains in assessing the climate and improving the racial dynamics on a campus.

Sense of belonging is one dimension of the transition to college process. For a deeper understanding of diversity, other outcomes, which past research shows are important to consider, should also be explored. More research is needed on relationships between diversity and other transition outcomes such as academic self-concept, ease in managing family responsibilities, and ease in making new friends. In our study, we combined African American, Asian American, and Latina/o students into one group, which is a limitation. Future analyses will disaggregate students of color into discrete ethnic groups. Analyses examining difference for various ethnic groups is important as past research has demonstrated the unique positions of different groups. Racial and ethnic

differences could have contributed to the minor differences we saw between students of color and White students and merits attention in future studies.

Conclusion

Checkoway (2001) writes, "For democracy to function successfully in the future, students must be prepared to understand their own identities, communicate with people who are different than themselves, and build bridges across cultural differences in the transition to a more diverse society" (p. 267). PWIs have made concerted efforts to increase the number of students of color on their campuses. Many campuses have institutionalized programs and practices designed to support their historically underrepresented students of color and facilitate interactions among diverse students. These include programs that provide academic support, community outreach, and "safe spaces" in addition to initiatives that integrate learning and put strategic plans into place. Examples of their goals and objectives, outlined by Hurtado (2003a) include:

> 1. Ensuring that students of underrepresented populations have the support they need to be academically successful.
>
> 2. Building relationships and developing multicultural skills with members from diverse backgrounds.
>
> 3. Enhancing students' ability to participate in a pluralistic, interdependent global community.
>
> 4. Increasing the participation of students of color in campus life.

Implicit and explicit in these four goals is a belief that there is a relationship between students' transition to college and their experiences with diversity. Our findings support the increasing body of literature on the impact of interactions with diverse peers on college outcomes and provide additional empirical evidence to assist campuses who are responding to the AAC&U's charge for "inclusive excellence." Specifically, positive

interactions with diverse peers result in an increased sense of belonging to campus, while interactions with diverse peers that result in anxiety detract from this sense of belonging.

The nature of interactions with diverse peers in college is affected by the demographics of students' pre-college environment, students' predisposition to engage in diversity-related activities, and the frequency with which students socialize with one another. Given the importance of sense of belonging for promoting student persistence and academic achievement, colleges and universities should find ways to facilitate these interactions with diverse peers that lead to positive educational outcomes. Only recently has the relationship between diversity experiences and various cognitive, sociocognitive, and democratic outcomes been explored (Gurin et al., 2002; Hurtado, 2003a, 2003b; Milem et al., 2005), and much more research needs to be done to understand the types of experiences that yield long-term benefits in a variety of collegiate settings. The skills gained from interactions and relationships with diverse peers are important as a means not only for enhancing college success but also for providing experiences that will benefit graduates as they live and work in an increasingly pluralistic society.

Past research has demonstrated that students' sense of belonging is critical to college transitions. Successful transitions in turn lead to more positive educational outcomes. This paper demonstrated how students' predisposition as they entered college influenced their subsequent interactions but also how interactions in college influence their sense of belonging. It is these experiences that colleges can alter. Our findings underscore the importance of institutions investing resources in supporting and developing programs that facilitate meaningful interactions across racial and ethnic groups. A deepened understanding about how a sense of belonging facilitates college transitions and long-term success in college is key. Future research can explore the extent to which sense of belonging then translates into the development of knowledge and skills to function in a pluralistic society.

Appendix 3.1

Matrix of Correlations among Diversity and Transition to College Variables (All students)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1 Racial composition of neighborhood grew up in	1.00																	
2 Racial composition of high school	0.59	1.00																
3 Racial composition of friends in high school	0.65	0.70	1.00															
4 Participate in activities of my own culture in college	-0.23	-0.18	-0.29	1.00														
5 Take diversity course 1st year of college	-0.05	-0.02	-0.09	0.33	1.00													
6 Join cultural diversity organization in college	-0.14	-0.10	-0.22	0.44	0.46	1.00												
7 Discussed/studied with diverse peers	-0.10	-0.08	-0.14	0.13	0.07	0.17	1.00											
8 Talked honestly about race with diverse peers	-0.08	-0.07	-0.13	0.10	0.09	0.21	0.70	1.00										
9 Dined/socialized with diverse peers	-0.08	-0.05	-0.09	0.07	0.06	0.14	0.69	0.70	1.00									
10 Hours per week socializing with other students	0.08	0.09	0.15	0.01	0.04	0.01	0.19	0.20	0.28	1.00								
11 There is a lot of racial tension on the University campus	-0.05	-0.04	-0.10	0.15	0.13	0.19	0.06	0.07	-0.01	0.01	1.00							
12 I see myself as a part of the university community	0.02	0.06	0.07	0.07	-0.01	0.02	0.18	0.16	0.22	0.25	-0.09	1.00						
13 I feel a sense of belonging to this university	0.00	0.04	0.06	0.07	0.01	0.02	0.18	0.17	0.24	0.27	-0.07	0.68	1.00					
14 I feel that I am a member of the university community	0.01	0.06	0.08	0.08	-0.01	0.02	0.20	0.19	0.25	0.27	-0.07	0.82	0.80	1.00				
15 Anxiety of interactions with different races	0.01	0.00	0.03	0.03	-0.01	0.05	-0.11	-0.09	-0.16	-0.09	0.19	-0.13	-0.10	-0.11	1.00			
16 Living with parents	-0.15	-0.13	-0.16	0.02	-0.05	-0.02	-0.03	-0.03	-0.07	-0.27	-0.07	-0.21	-0.21	-0.22	-0.01	1.00		
17 Female	0.03	0.03	0.04	0.08	0.17	0.19	0.05	0.15	0.06	0.04	0.03	0.09	0.07	0.09	0.08	-0.03	1.00	
18 Institutional longitudinal adjusted weight	-0.08	-0.08	-0.11	0.02	-0.09	-0.14	-0.04	-0.13	-0.08	-0.05	-0.02	-0.06	-0.07	-0.07	-0.08	0.04	-0.74	1.00

Appendix 3.2

Matrix of Correlations among Diversity and Transition to College Variables (White Students)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1 Racial composition of neighborhood grew up in	1.00																	
2 Racial composition of high school	0.59	1.00																
3 Racial composition of friends in high school	0.57	0.66	1.00															
4 Participate in activities of my own culture in college	-0.09	-0.07	-0.07	1.00														
5 Take diversity course 1st year of college	0.01	-0.02	-0.05	0.26	1.00													
6 Join cultural diversity organization in college	-0.07	-0.08	-0.16	0.32	0.41	1.00												
7 Discussed/studied with diverse peers	-0.12	-0.08	-0.18	0.07	0.01	0.13	1.00											
8 Talked honestly about race with diverse peers	-0.12	-0.10	-0.21	0.03	0.05	0.19	0.71	1.00										
9 Dined/socialized with diverse peers	-0.14	-0.07	-0.19	0.02	0.05	0.12	0.70	0.72	1.00									
10 Hours per week socializing with other students	0.02	0.05	0.09	0.05	0.07	0.03	0.17	0.16	0.25	1.00								
11 There is a lot of racial tension on the University campus	-0.03	-0.07	-0.05	0.15	0.12	0.20	0.04	0.06	0.00	0.03	1.00							
12 I see myself as a part of the university community	0.01	0.07	0.05	0.08	-0.01	-0.02	0.18	0.17	0.21	0.24	-0.07	1.00						
13 I feel a sense of belonging to this university	0.01	0.04	0.00	0.11	0.03	0.02	0.20	0.17	0.25	0.26	-0.04	0.69	1.00					
14 I feel that I am a member of the university community	0.01	0.07	0.05	0.11	0.01	0.00	0.22	0.19	0.24	0.26	-0.03	0.83	0.80	1.00				
15 Anxiety of interactions with different races	0.04	0.00	0.10	0.04	-0.04	0.10	-0.11	-0.10	-0.16	-0.03	0.17	-0.09	-0.06	-0.08	1.00			
16 Living with parents	-0.09	-0.14	-0.15	0.00	-0.07	-0.03	-0.03	-0.04	-0.11	-0.29	-0.04	-0.21	-0.20	-0.21	0.00	1.00		
17 Female	0.06	0.06	0.07	0.07	0.20	0.20	0.03	0.14	0.07	0.04	0.03	0.11	0.08	0.11	0.09	-0.03	1.00	
18 Institutional longitudinal adjusted weight	-0.03	0.00	-0.04	-0.01	-0.14	-0.18	-0.04	-0.14	-0.09	-0.05	-0.03	-0.09	-0.08	-0.10	-0.09	0.05	-0.82	1.00

Appendix 3.3

Matrix of Correlations among Diversity and Transition to College Variables (Students of Color)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1 Racial composition of neighborhood grew up in	1.00																	
2 Racial composition of high school	0.59	1.00																
3 Racial composition of friends in high school	0.59	0.64	1.00															
4 Participate in activities of my own culture in college	-0.14	-0.05	-0.24	1.00														
5 Take diversity course 1st year of college	-0.04	0.07	-0.04	0.44	1.00													
6 Join cultural diversity organization in college	-0.07	0.05	-0.11	0.56	0.52	1.00												
7 Discussed/studied with diverse peers	0.11	0.09	0.17	0.09	0.15	0.16	1.00											
8 Talked honestly about race with diverse peers	0.16	0.17	0.21	0.05	0.13	0.17	0.67	1.00										
9 Dined/socialized with diverse peers	0.17	0.17	0.31	-0.03	0.04	0.09	0.64	0.64	1.00									
10 Hours per week socializing with other students	0.11	0.09	0.19	0.02	0.01	0.02	0.32	0.33	0.41	1.00								
11 There is a lot of racial tension on the University campus	-0.02	0.05	-0.13	0.11	0.13	0.15	0.04	0.05	-0.07	-0.01	1.00							
12 I see myself as a part of the university community	0.06	0.06	0.17	0.04	-0.04	0.08	0.18	0.14	0.25	0.27	-0.15	1.00						
13 I feel a sense of belonging to this university	-0.06	0.00	0.14	0.04	-0.03	0.04	0.15	0.19	0.24	0.30	-0.12	0.67	1.00					
14 I feel that I am a member of the university community	0.00	0.02	0.16	0.03	-0.06	0.06	0.20	0.20	0.28	0.29	-0.16	0.80	0.81	1.00				
15 Anxiety of interactions with different races	-0.05	0.00	-0.04	-0.02	0.04	-0.06	-0.10	-0.08	-0.20	-0.21	0.22	-0.23	-0.21	-0.20	1.00			
16 Living with parents	-0.14	-0.04	-0.08	-0.08	-0.03	-0.07	-0.07	-0.06	-0.07	-0.23	-0.15	-0.22	-0.22	-0.23	-0.04	1.00		
17 Female	-0.02	-0.03	-0.04	0.14	0.10	0.18	0.09	0.20	0.05	0.04	0.06	0.04	0.04	0.03	0.04	-0.02	1.00	
18 Institutional longitudinal adjusted weight	-0.08	-0.13	-0.10	-0.06	-0.04	-0.16	-0.12	-0.20	-0.14	-0.01	-0.03	-0.01	-0.05	-0.01	-0.05	-0.02	-0.58	1.00

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CHAPTER IV

STUDENT PARTICIPATION IN COCURRICULAR DIVERSITY PROGRAMS

Introduction

Social science research examining how students develop the necessary skills to participate in a diverse democracy were key pieces of evidence considered by the Supreme Court in *Gratz v. Bollinger*. Gurin, Dey, Hurtado, and Gurin (2002) completed one of the primary studies cited in this area of research weaving Erikson's (1946, 1956) work on identity, Newcomb's (1943) work on political and social perspectives, and Piaget's (1971, 1985) theories on disequilibrium together. These theories were the foundation of their assertions about how interactions with diverse peers in college environments challenge students' perspectives in and out of the classroom, particularly when students come from racially and socially homogenous pre-college environments. Gurin et al. proposed three definitions of diversity (structural, classroom, and informal interactional), which they used to assess learning and democracy outcomes for African American, Asian American, Latina/o, and White students. There is a growing body of research on the effects of diverse higher education environments on college students. Students' cognitive development and their development of democratic skills are the primary focus of this research (Hurtado, 2003).

In 2005, the American Association of Colleges and Universities (AACU) created an initiative entitled *Making Excellence Inclusive: Diversity, Inclusion, and Institutional*

Renewal, where they commissioned several papers examining the connection between excellence and diversity. In one of these papers, Milem, Chang, and Antonio (2005) updated Hurtado, Milem, Clayton-Pederson, and Allen's (1999) conceptualization of the campus climate for racial and ethnic diversity. The Hurtado et al. (1999) model encapsulated a complex sociopolitical environment for diversity and posited how the broader societal context affects colleges' and universities' commitments to and engagements with creating learning environments that support diversity. Both frameworks account for the governmental and political context and forces that influence higher education institutions, as well as the sociohistorical context that shapes institutional policies for racial and ethnic diversity. The Milem, Chang, and Antonio model[1] (2005) has an Organizational/ Structural Dimension, which includes diversity of the curriculum, tenure policies, organizational decision-making policies, and budget allocations and represents a growing acknowledgment that concrete institutional actions are important to college student experiences with diversity. The model's five interconnected dimensions help provide a framework within which to understand how institutions may foster cross-racial interactions in dynamic internal and external sociopolitical environments.

Multicultural competencies have become part of the skill set college students need to function in the work place. If institutions are to continue to prepare students for leadership positions and the workforce in the twenty-first century, they must create opportunities for students to develop these skills and competencies (Chesler, 2002). Curricular and cocurricular initiatives that help college students develop core

[1] The Milem, Chang, and Antonio AACU model is based on work completed by Milem, Dey, and White (2004).

competencies necessary for participation in an increasingly interconnected world and changing society are receiving increased attention. Central to this area of research and practice are conditions under which meaningful interactions with racially/ethnically diverse others occur and the effects such interactions with diverse peers have on college students, the educative benefits of which were highlighted in *Gratz v. Bollinger*.

This study examines the relationships between pre-college environments and dispositions, interactions with diverse others in college, and students' engagement in cocurricular diversity programs. By focusing on these interrelationships, this study explores what prompts students to engage with diverse others formally and informally. Further, it tests for differences between African American, Latina/o, and White students.

Previous Research

Gurin, Dey, Hurtado, and Gurin (2002) found distinct racial and ethnic group differences in their examination of the educational benefits of diverse college environments. Although both classroom and informal diversity have positive effects on learning and diversity outcomes for all four racial and ethnic groups included in their analyses, informal interactional diversity is more important to students' learning and democracy outcomes. This research strongly suggests that positive outcomes associated with a diverse learning environment are not achieved through traditional academic learning alone. Moreover, the types of encounters with diverse peers that have been found to affect college students must be substantive and meaningful if they are to mediate perceived racial tension on campus and anxiety with diverse peers (Gurin, et al., 2002).

Well-established psychological and social psychological theories frame the growing higher education literature on the impact of racial/ethnic diversity on students.

For example, the theoretical and conceptual foundations of Gurin, Dey, Hurtado, and Gurin's (2002) work included three primary theories to frame the college experience and adolescent development: identity as posited by Erikson (1946, 1956); the development of political and social perspectives in college as examined by Newcomb (1943); and disequilibrium as a cognitive process formulated by Piaget (1971, 1985). Gurin and her colleagues offered a new conceptualization of why race and ethnicity matter in college. This new conceptualization added to Allport's (1954) intergroup contact hypotheses and Feldman and Newcomb's (1969) accentuation theory, thus providing a framework from which to understand how college students engage with diverse peers as well as campus sponsored programs and activities focused on racial/ethnic diversity.

Allport's (1954) theory on intergroup relationships shapes the literature on cross-racial interactions in the college context. Allport specified the following conditions that, once met, lead to greater cross-racial liking and respect: (a) equal group status; (b) common goals; (c) cooperation across groups; and (d) sanctions and support from authority. Allport argued that interactions across racial and ethnic boundaries could facilitate mutual liking and respect and under certain conditions ameliorate racial tension. In the college context, Allport's conditions suggest interactions must be directed and meaningful, and the work of Gurin and her colleagues supports this notion. Feldman and Newcomb's (1969) accentuation theory has also shaped the growing body of higher education literature on college student interactions with diverse others. Feldman and Newcomb hypothesized that students enter college predisposed to certain values and attitudes and that students seek out peers and activities that fit their preexisting

perspectives. This in turn accentuates and reinforces their predispositions over the course of their time in college.

This study focuses on how and why interactions with diverse others influence the predispositions students enter college with, and how such experiences shape their overall college experience. In the past ten years, a number of scholars have explored aspects of Feldman and Newcomb's (1969) accentuation theory relative to students' experiences with racial/ethnic diversity in college. Pascarella, Edison, Nora, Hagedorn, and Terenzini (1996) found that students' initial openness to diversity, as measured by the CSEQ, was related to their courses, study habits, residential environment, peer interactions, and their specific college environment. Another study, conducted at a large public research institution, found that first year students had high levels of campus engagement and openness to diversity (as measured by Pascarella's 1996 scale). Summers, Svinicki, Gorin, and Sullivan (2002) found that most first-year students at a large research university had high levels of engagement. Lastly, a number of studies have affirmed the effects of homogeneous pre-college experiences and environments on choices students make in their college years. Although educational segregation is no longer legal in the U.S., racial segregation in housing and education endures (Orfield, Bachmeier, James, & Eitle, 1997; Orfield & Lee, 2006). In Chapter III, the racial composition of pre-college neighborhoods, high schools, and peer groups was found to affect how students interact with their peers in college in accord with previous research (Nunez, 2005; Saenz, Ngai, & Hurtado, 2007). Such segregation *does* affect the college experience.

Being in a diverse college environment challenges perceptions held by students coming from racially/ethically homogeneous backgrounds. This is related to Piaget's

assertions about cognitive disequilibrium: interactions with diverse others are capable of interrupting students existing notions of their racially/ethnically diverse peers. In the *Gratz v. Bollinger* decision, it was noted that a critical mass of underrepresented minority students is necessary to realize the educational benefits of a diverse student body and for underrepresented students to feel comfortable on campus. The importance of a critical mass of historically underrepresented students of color is supported by the literature pertaining to the campus racial climate (see Cabrera et al., 1999; Davis et al., 2004; Hurtado, 1992; Morley, 2003; Reid & Radhakrishnan, 2003 Rendón et al., 2000; Tierney, 1992).

Stephan and Stephan's theory of intergroup contact posits that prior intergroup relationships, prior cognitive judgments about others and the nature of specific lived situations dictate the levels of anxiety individuals experience around intergroup contact. Previous research has found that intergroup anxiety mediates how intergroup contact affects racial attitudes on stereotypes and subsequent intergroup contact (Stephan, Boniecki, Ybarra et al., 2002). Previous negative contact was the strongest precursor for anxiety with diverse others. Additionally, Stephan and Stephan (1989) found that Latina/o student perceptions of lower status and negative stereotyping led to higher levels of intergroup anxiety. This suggests that a poor campus climate, where Latina/o students are targets of discrimination, will produce higher degrees of anxiety about cross-racial interactions among Latina/o students. This is significant because other research has demonstrated the importance of positive interactions with diverse peers in college, and intergroup anxiety has been found to be an important predictor and mediator of negative racial attitudes (see Chapter III; Engberg, 2004, 2007; Saenz, Ngai, & Hurtado, 2007).

Negative racial attitudes may have a dampening affect on students' willingness to engage in activities that might foster skills needed to function in diverse groups and settings. If negative perceptions of racially/ethnically diverse others are not counteracted, students may miss opportunities to develop the skills necessary to function in an increasingly globally interdependent world.

Recent large-scale, longitudinal studies like the National Survey of Student Engagement (NSSE) represent a major effort to assess college student engagement. This body of research reveals specific experiences associated with positive outcomes and underscores the importance of out-of-classroom experiences that shape the overall college experience (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007). Faculty-student interactions, engaging with ones' peers outside of the classroom, and involvement with cocurricular activities while in college are ways students become connected to their campuses (Astin, 1993; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007). Curricular diversity programs and activities often foster positive cross-racial interactions. Nagda, Kim, and Truelove (2004) found that non-traditional pedagogical approaches to learning, such as their enlightenment-encounter curricular intervention, have positive effects on students' motivation and engagement with learning across racial/ethnic differences. Additionally, Nelson-Laird (2005) found that students' engagement with diversity-oriented coursework and interactions with racially/ethnically diverse others affects their academic self-confidence and critical thinking skills. Despite recent research which highlights the importance of the inclusion of diversity in the formal curriculum (see Nelson-Laird, Engberg, & Hurtado, 2005), out-of-class experiences remain a key part of the college experience. It may be that the formal *and* informal contexts for cross-racial

interactions must be available to students in order for them to access the benefits of a racially/ethnically diverse student body.

Students from different racial/ethnic backgrounds vary in their engagement with diversity-related activities. For example, Chavous (2005) found a positive relationship for White students between perceptions of intergroup contact and level of participation in student organizations with diverse sets of students. Chavous suggests that because African Americans are more likely to have contact with Whites in pre-college environments, simple contact in a college environment is not enough to influence students' interactions with diverse others in college; these interactions must be substantive to be meaningful. Other studies suggest that despite students' involvement in cultural awareness programs aimed at increasing sensitivity, their racial/cultural background may explain more about their perspectives on race than any college intervention (Neville & Furlong, 1994). An example of these racial and ethnic differences is Nunez's (2005) finding that while Latino and White students both benefited in terms of their sense of belonging from cross-racial interactions and engagement in cocurricular activities, this effect was strongest for Latina/os.

In their review of research on how Whiteness operates in the college context, Reason and Evans (2007), call for support for White students as they navigate college contexts that are racially charged.[2] They rationalize that while all students need support to navigate the racialized context of college, this is especially important for White students. Further, they argue that the responsibility to provide such support rests with institutions. It may be that students from various racial/ethnic backgrounds need variant types of

[2] Reason and Evans (2007) call for the support of White students, but acknowledge the complexities of doing so due to support for colorblindness, enduring White privilege, and the sense of entitlement some White students display.

support. Their argument is supported by the many studies showing the influence of pre-college environments on choices students make in college. Milem, Umbach, and Liang (2004) found that White students' frequency of interactions with diverse others in pre-college environments, as well as plans to engage in diversity activities while in college, had direct significant and positive effects on their interactions with diverse others in college. Others have found similar patterns of relationships between such pre-college experiences for students of color as well as for White students (Locks, Hurtado, Bowman & Oseguera, 2008; Malaney & Berger, 2005; Saenz, 2005; Saenz, Ngai, & Hurtado, 2007). Many primarily White institutions (PWIs) continue to face challenges with racial tension among students. Previous research has shown that students of color are particularly sensitive to perceived racial tension on campus (Gloria, Hird, & Navvaro, 1999; Smedley, Myers, & Harrell, 1993).

Institutions that sponsor diversity awareness workshops and host discussions on racial/ethnic issues send a message that diversity is valued on their campuses. Research has demonstrated that participation in diversity workshops, even those that are short-term, decreases students' negative perceptions of their diverse peers (Springer, Palmer, Terenzini, Pascarella, & Nora, 1996). Cocurricular diversity programs and activities often help students establish common goals and encourage group cooperation, and thus may be another way colleges can counteract the continuing influence of pre-college environments. Institutional programs that continue for a full semester or academic year are one way campuses can meet Allport's call for authoritative sanctions and provide students with the opportunity to have preconceived notions of diverse others challenged.

The crucial question is how the pre-college experiences influence participation in college cocurricular experiences.

Research Question

As higher education continues to be a contested area of U.S. society with regard to access at state flagships and other top tier institutions, there has been a renewed focus on diversity and student outcomes. Differential outcomes for students of color and White students have consistently been found. While the benefits of diversity hold true for all students, White students are more likely to benefit than students of color (Gurin, Dey, Hurtado, & Gurin, 2002). Another body of research relevant to this study is the literature on the climate for students of color at PWIs. The specific question guiding this study is:

> What pre-college and college experiences with diverse peers affect participation in cocurricular diversity programs for African American, Latina/o, and White students in the second year of college?

Theoretical Structural Model and Hypotheses

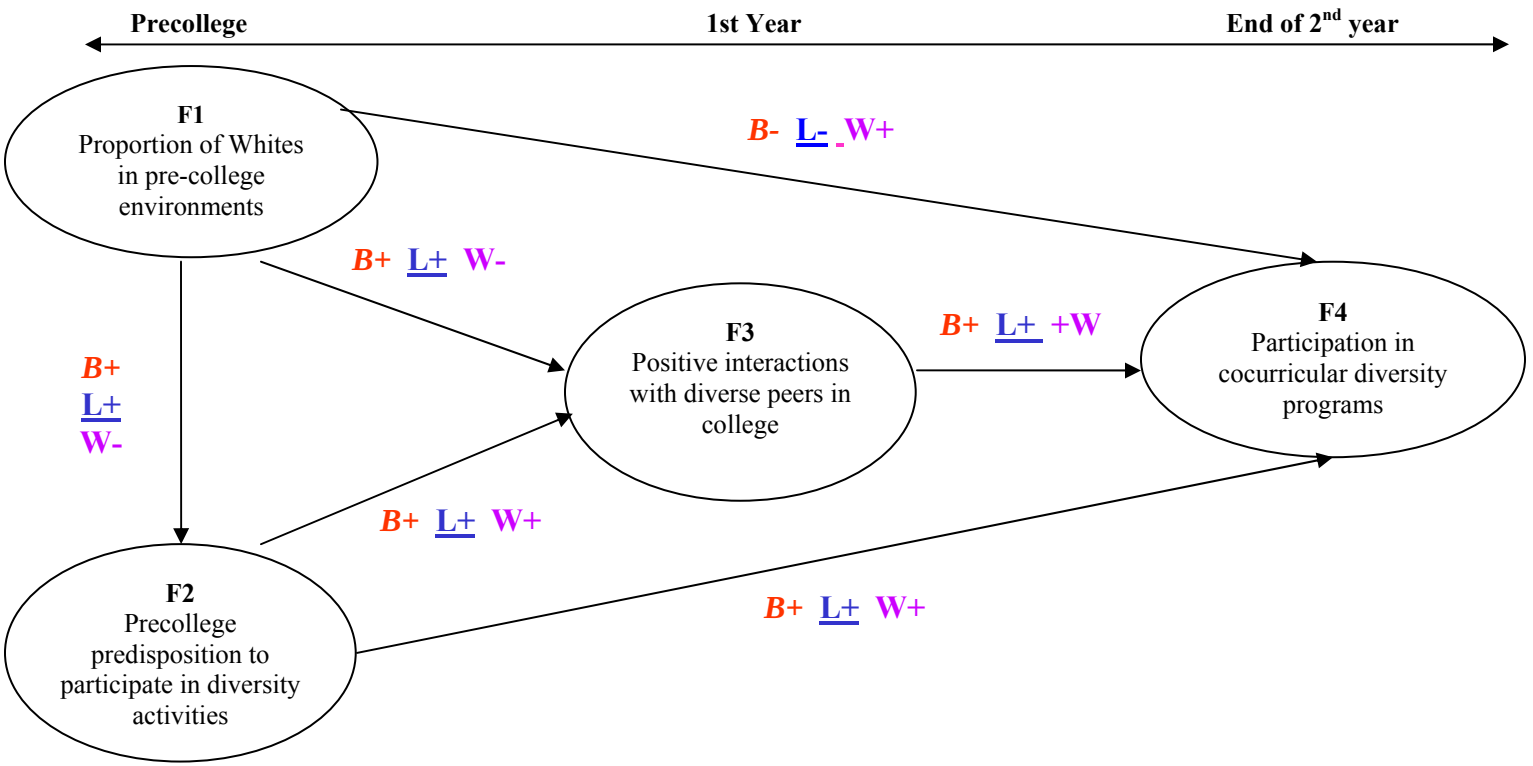
Many factors may contribute to students' participation in cocurricular diversity programs. The diagram in Figure 4.1 depicts hypothesized relationships among these factors. My hypotheses were:

> 1. The proportion of Whites in pre-college environments will have direct and indirect effects on students' participation in cocurricular diversity programs (negative for African Americans and Latinos; positive for Whites).
>
> 2. For all students, a predisposition to participate in diversity related activities will have positive direct and indirect effects on their interactions with diverse peers in college and their participation in cocurricular diversity programs.
>
> 3. The proportion of Whites in pre-college environments will have indirect and direct effects on students' positive interactions with diverse peers in college (positive for African Americans and Latinos; negative for Whites).

4. Positive interactions with diverse others will mediate the negative effects of both students' anxiety about interacting with diverse others and perceived racial tension on campus on participation in cocurricular diversity programs and have a direct effect on students' participation in these programs.

These hypotheses are based on a number of research studies. For example, Stephan and Stephan's (1989) found that students of color experience anxiety when interactions with White students. Saenz, Ngai, & Hurtado (2007) suggest that students of color who come from predominantly White pre-college environments may be more likely than students from more homogenous backgrounds to seek opportunities for cross-racial interactions at the beginning of college, but less likely to do so after being in the college environment for two years. Higher education literature gives strong indications that the campus climate for racial diversity is critically important for how students engage with one another across racial and ethnic groups (Chang, 1996, 2003; Engberg, 2007; Nelson-Laird, Engberg, & Hurtado, 2005; Saenz, Ngai, & Hurtado, 2007); this may be especially true for students of color (Cabrera et al., 1999; Hurtado, 1992; Rendón et al., 2000; Tierney, 1992). Previous research has also demonstrated that positive interactions with diverse others has implications for a variety of student outcomes (see Chapter III, Chang, 1999, 2003; Engberg, 2007; Nelson-Laird, Engberg, & Hurtado, 2005; Saenz, Ngai, & Hurtado, 2007). In combination, these findings impacted the variables included in the model and the hypothesized relationships. For example, I include latent factors such as anxiety about diverse peers and perceived racial tension on campus in the structural models tested in this study.

Figure 4.1 Theoretical Structural Model for Participation in Cocurricular Diversity Programs



Methods

Data Source

Data were drawn from a national, multi-institutional research project that included ten public universities. The Diverse Democracy Project,[3] undertaken in 2000 and 2001 under the direction of Sylvia Hurtado, was supported by a Field Initiated Studies Program grant from the Office of Educational Research at the U.S. Department of Education. Campuses with a strong commitment to diversity and to the public good through community engagement were targeted for inclusion. Longitudinal surveys examined students' attitudes and experiences on a variety of issues and focused on issues related to diversity and civic engagement. These surveys were administered either via mail, during orientation, or in courses with large enrollments of first year students (e.g., first-year seminars and English courses). The response rate ranged from a low of 12% to a high of 81% for individual campuses, with an average of 35% for the ten institutions. Data were collected at two points: first, in 2000 (at the beginning of the first college year); and second, in 2002 (at the end of the second college year); 4,471 students completed both the first and second year surveys.

Sample

The dataset used in these specific analyses included 3,950 students from nine of the 10 campuses who participated in the study.[4] Confirmatory analyses were performed on the entire sub-sample of African American, Latina/o, and Whites students only (n=3,950, unweighted); 5% of participants were Hispanic/Latina/o/Chicano, 8% were African American/Black and 85% were White.

[3] The student survey instruments used in this study are provided at the end of this document.
[4] One institution's response rate for the second survey was too low for them to be included in these analyses.

Missing Data Analysis

An expectation-maximization (EM) algorithm was used to replace missing data. Values for all independent variables were replaced using the EM algorithm in EQS Version 6.1 (EQS). The EM algorithm is an acceptable technique to replace missing data when less than 10% of the cases have missing data (Dempster, Laird, & Rubin, 1977, cited in Allison, 2002; McLachlan & Krishnan, 1997). The items used in these analyses have less than 7% missing data, ranging from .79% to 6.96% missing data. The results of the data replacement using an EM algorithm represent maximum likelihood (ML) estimates established by first generating expected values then maximized values, utilizing a covariance matrix and drawing on all variables as predictors for generating imputed data.

Adjusting the Data for Non-Response

As done with analyses in Chapter III, the characteristics of each institution's first-year student population were used to create weights, which were then utilized to correct for any response bias and to reflect each campus's total first-year population. Electronic data was requested from each institution on their population of first-year students in order to develop the weights for their campus. The same weighting technique was used for all of the institutions. Because of the large sample size, an adjusted weight variable was created to avoid a weighted sample with incorrect standard errors and inflated t-statistics. The adjusted weight variable was calculated by dividing the total weight variable by the mean of the final total weight variable for each group.

Measures

Main dependent measure.

The outcome in this study was student participation in cocurricular diversity programs. This study compared two structural equation models, each with a distinct factor that comprised participation in cocurricular diversity programs. The first model's factor in the final SEM discussed in this chapter included two items ("Campus organized discussions on racial/ethnic issues" and "Diversity awareness workshops"), each of which was scored on a five-point Likert frequency of attendance scale (1="Never" to 5="Very often"). The second model represented a more sustained type of engagement in cocurricular diversity programs. This factor was comprised of three items regarding participation: "Living in a culturally-themed residence hall/floor/house," "Joining an organization reflecting one's own cultural heritage" and "Joining an organization that promotes cultural diversity." These items were recoded as a count variable, with "low" assigned for no participation in any of the three activities; moderate for participation in one of the activities; and high if a student participated in two or more of the activities. This recoded variable was combined with another recoded item, "Attended events sponsored by other racial/ethnic groups." This item was measured on a five-point, Likert scale item 1="Never" to 5="Very often" and was recoded to match the categories of the other three items (low, moderate and high): "Never" was coded as low, "Seldom" and "Sometimes" were coded as moderate and "Often" and "Very often" were coded as high. These recoded items were used to create a two-item factor used in the second SEM, which examined a more sustained type of engagement in cocurricular diversity programs.

Endogenous factors and variables.

Two endogenous factors were included in the model: (a) predisposition to participate in diversity-related activities, and (b) positive interactions with diverse peers in college. Predisposition to participate in diversity-related activities is a six-item factor: Perceived racial tension on campus was included as an endogenous observed variable It was measured on a four-point Likert scale (1 = "Strongly disagree" to 4 = "Strongly agree," in response to "There is a lot of racial tension on the university campus." The second model also examined relationships between interactions with diverse others and participation in cocurricular diversity programs but focused on a more sustained engagement with cocurricular diversity programs. In the second model, the item anxiety with diverse peers in college was treated as an endogenous variable.

Exogenous factor and variable.

Previous research has demonstrated the lasting impact pre-college segregation has on college students' educational experiences (see Chapter II; Orfield, 1997; Orfield & Lee, 2006; Saenz, Ngai, & Hurtado, 2007). The only exogenous variable included in the cocurricular diversity programs model captured students' exposure to racially/ethnically diverse pre-college environments. Additionally, at this stage of analysess anxiety with diverse peers was an exogenous variable with paths to factors positive interactions with diverse peers and participation in cocurricular diversity programs.

Group variable.

Since White students and students of color often have different experiences and college outcomes, each racial group was assigned a number for the three-group

Table 4.1 ***Means and Standard Deviations of Cocurricular Diversity Engagement Variables by All Students, African Americans, Latina/os, and Whites***

	All Students			*African American*			*Latina/o*			*White*		
Variables and factors	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD	n
Proportion of Whites in Pre-college Environment												
Racial composition of neighborhood grew up in	4.05	1.04	3919	2.77	1.33	219	3.14	1.25	366	4.24	.87	3334
Racial composition of high school	3.77	1.01	3905	2.96	1.17	217	3.04	1.11	364	3.90	.93	3324
Racial composition of friends in high school	3.87	1.00	3899	2.65	1.07	217	3.02	1.11	363	4.04	.88	3319
Pre-college Predispositions to Participate in Diversity Activities												
Participate in activities of my culture in college	2.21	.94	3899	3.17	0.75	218	2.73	.90	366	2.09	.90	3315
Take diversity course 1st yr of college	2.26	.94	3896	2.70	0.94	216	2.40	.90	366	2.21	.94	3314
Join cultural diversity org in college	2.27	.85	3867	2.93	0.87	214	2.55	.92	364	2.20	.81	3289
Anxiety of Interactions of Difference Races	1.66	.61	3693	1.68	0.56	200	1.64	.61	355	1.66	.61	3138
Positive Interactions with Diverse Peers in College												
Dined or shared a meal	3.56	1.17	3774	3.88	1.16	208	3.88	1.20	358	3.51	1.16	3208
Had meaningful and honest discussions about race/ethnic relations outside of class	2.84	1.20	3773	3.19	1.16	208	3.13	1.26	359	2.79	1.18	3206
Shared personal feelings and problems	3.21	1.24	3766	3.40	1.19	207	3.42	1.23	359	3.17	1.24	3200
Studied or prepared for class	3.28	1.24	3762	3.82	1	207	3.58	1.17	356	3.21	1.25	3199
Socialized or partied	3.53	1.14	3766	3.59	1.16	207	3.63	1.21	359	3.51	1.13	3200
Had intellectual discussions outside of class	3.19	1.19	3739	3.39	1.07	205	3.36	1.19	356	3.16	1.19	3178
There is a lot of Racial Tension on the University Campus	1.71	.75	3759	2.07	0.85	205	1.65	.78	360	1.69	.73	3194
Participation in Cocurricular Diversity Programs												
Campus organized discussions on racial/ethnic issues	1.49	.81	3762	2.01	1.11	207	1.53	.89	359	1.46	.76	3196
Diversity awareness workshops	1.42	.77	3756	1.83	0.99	208	1.48	.88	358	1.38	.74	3190
Attended events sponsored other racial/ethnic groups	1.75	.63	3950	2.03	.67	220	1.92	.72	370	1.71	.63	3360
Sustained participation in diversity activities	1.75	.70	3950	2.08	.69	220	1.86	.77	370	1.71	.69	3360

comparison model that allowed me to detect differences across racial and ethnic group (1 = African American, 2 = Latina/o, and 3 = White).

Analyses

Data were analyzed using structural equation modeling (SEM) techniques, and the covariance matrix of the data was analyzed using EQS Version 6.1 SEM software (EQS). Cronbach's alpha reliability estimates were performed on each group of items hypothesized to measure latent factors for the entire sample. I then calculated reliabilities separately for each ethnic group; they ranged from .633 to .884 (see Table 4.2). I completed confirmatory analyses that produced the measurement model results on the entire multi-ethnic sample of 3,950 African American, Latina/o and White students for the participating in diversity workshops and discussions model and the sustained diversity engagement model. In both cases, the measurement model included all latent factors, variables used to create those measures and two observed variables that captured students' anxiety with diverse others and their perceptions of racial tension on their campus. The entire multi-ethnic sample was used to test both full structural models. The final models represent fully constrained three-group comparison analyses of the following sub-samples: African American (n=220), Latina/o (n=370), and White (n=3360). To provide optimal clarity, I will describe the analyses conducted to arrive at the final SEM models separately.

Workshops and Discussions Model (Model I)

The measurement model included the dependent measure comprised of students' participation in campus workshops and discussions and three other factors: the proportion of Whites in pre-college environments, Pre-college predispositions to participation in

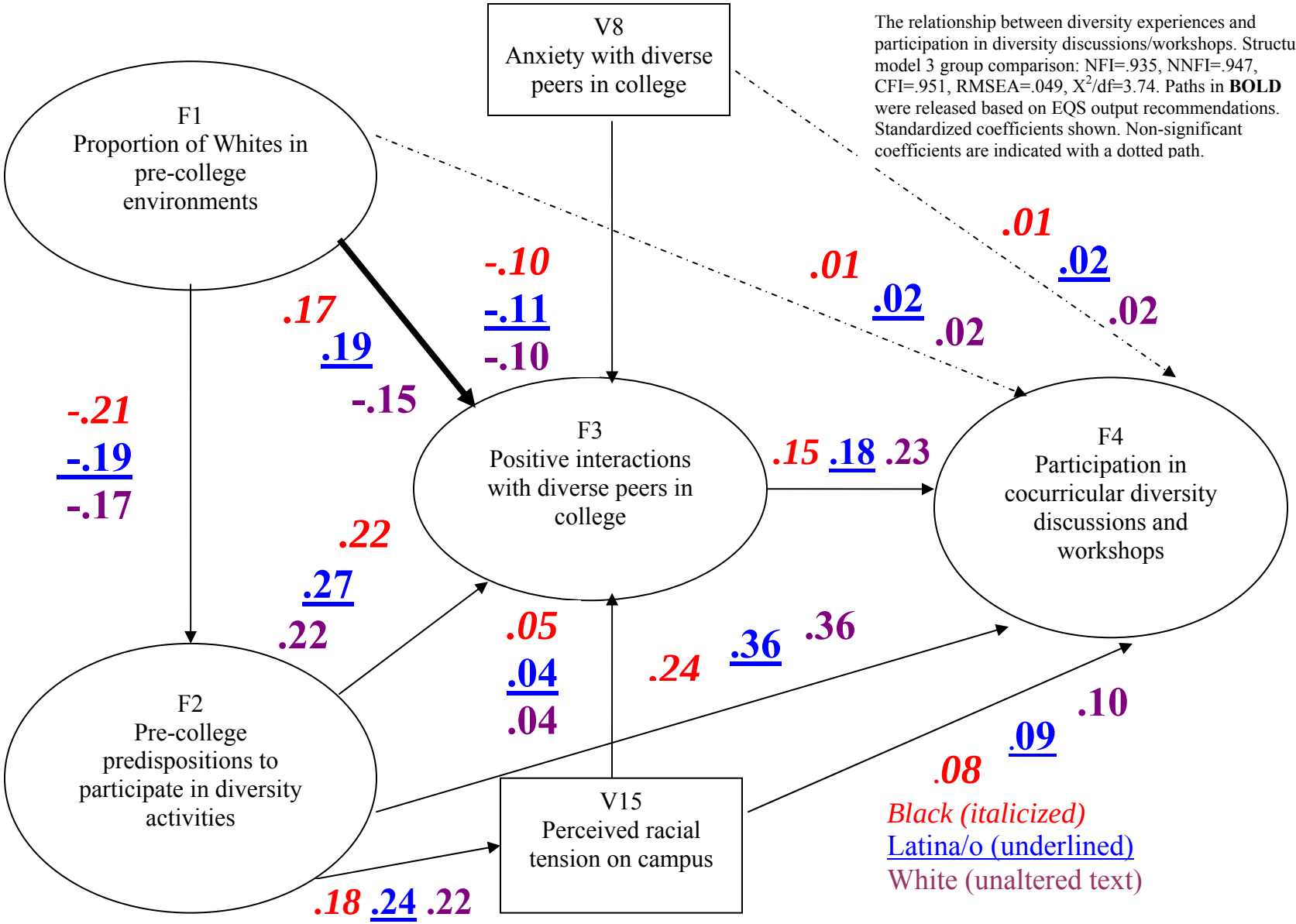
Table 4.2 ***Factor Loadings and Reliabilities for Independent Variables***

Factor Scales and Item Wording	Factor Loadings and Reliabilities All Students n=3950 *(alpha)*	African American n=220 *(alpha)*	Latina/o n=370 *(alpha)*	White n=3360 *(alpha)*
Degree of Whites Pre-college Environments [a]	*(.844)*	*(.766)*	*(.845)*	*(.807)*
Racial composition of neighborhood grew up in	.743	.594	.750	.792
Racial composition of high school	.824	.762	.853	.820
Racial composition of friends in high school	.844	.848	.819	.679
Pre-college Predispositions to Participate in Diversity Activities on Campus [b]	*(.672)*	*(.643)*	*(.769)*	*(.633)*
Participate in activities of my own culture in college	.570	.579	.658	.517
Take diversity course 1st year of college	.593	.661	.693	.580
Join cultural diversity organization in college	.766	.608	.830	.739
Positive Interactions with Diverse Peers in College [c]	*(.883)*	*(.851)*	*(.878)*	*(.884)*
Dined or shared a meal	.743	.677	.753	.741
Had meaningful and honest discussions about race/ethnic relations outside of class	.704	.720	.750	.694
Shared personal feelings and problems	.794	.735	.780	.798
Studied or prepared for class	.663	.478	.623	.672
Socialized or partied	.731	.775	.702	.735
Had intellectual discussions outside of class	.850	.802	.821	.857
Participation in Cocurricular Diversity Programs	*(.774)*	*(.769)*	*(.809)*	*(.761)*
Participated in campus discussions on racial issues [c]	.794	.792	.823	.784
Participated in diversity awareness workshops [c]	.794	.792	.823	.784
	(.426)	*(.547)*	*(.423)*	*(.397)*
Attended events sponsored other racial/ethnic groups [e]	.521	.613	.518	.498
Sustained engagement with diversity [d]	.521	.613	.518	.498

[a] Five-point scale: From All People of Color = 1 to All White = 5. [b] Four-point scale: From Very Unlikely = 1 to Very Likely = 4.
[c] Five-point scale: From Never = 1 to Very Often = 5. [d] Mark all that apply count variable recoded into 1= None, 2=Moderate, 3=Frequent.
[e] Five-point scale: From Never = 1 to Very Often = 5, recoded into 1= None, 2=Moderate, 3=Frequent.

diversity activities and Positive interactions with diverse peers in college. For this initial measurement model, the dependant measure was a 3-item factor that included frequency of participation in the following university sponsored events and activities: (a) groups reflecting own cultural heritage (loading=.445); (b) campus organized discussions on racial/ethnic issues (loading=827); and (c) diversity awareness workshops (loading=.757). The fit indices were acceptable for a measurement model (NFI=.939, NNFI=.928, CFI=.942, RMSEA=.064, χ^2/df=15.71) and I proceeded with the analyses by running a full SEM on the entire sample of 3,950. Overall, the fit indices worsened (NFI=.928, NNFI=.917, CFI=.932, RMSEA=.042, χ^2/df=2.51). Because the item Participating in groups reflecting own cultural heritage continued to have a low loading (.448) compared to .825 and .746 of the other two items, it was eliminated from the dependent measure in subsequent analyses. Thus, I completed analyses of a modified SEM with the revised, 2-item dependent measure and the fit indices improved (NFI=.946, NNFI=.938, CFI=.951, RMSEA=.055, χ^2/df=11.34). For the three-group comparison full SEM had adequate fit indices (NFI=.946, NNFI=.938, CFI=.951, RMSEA=.055, χ^2/df=11.34) and EQS recommended adding a path from students' predispositions to participate in diversity activities in college to perceived racial tension on campus. After making the aforementioned adjustments to the full SEM tested on the entire sample, I tested the same model for group invariance across African Americans, Latina/os, and Whites in a three-group comparison model. The goodness of fit indices for this fully constrained three-group comparison model, were NFI=.953, NNFI=.947, CFI=.988, RMSEA=.051, χ^2/df=9.89. After releasing the path from proportion of Whites in pre-college environments to positive interactions with diverse others in college, the final

Figure 4.2 Modeling Participation in Cocurricular Diversity Discussions and Workshops

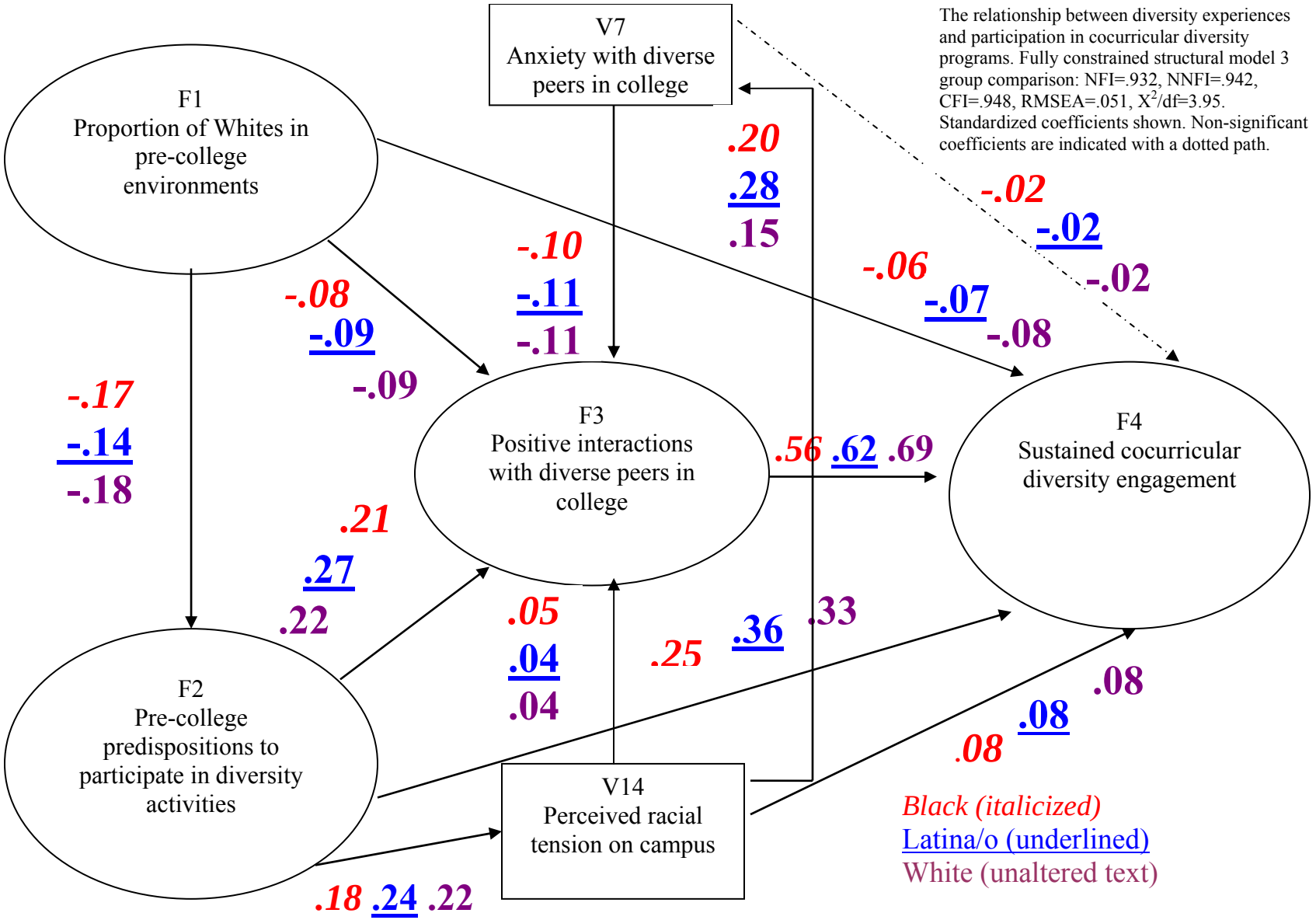


three-group comparison model fit indices were (NFI=.933, NNFI=.944, CFI=.949, RMSEA=.050, χ^2/df=3.86).

Sustained Diversity Engagement Model (Model II)

This model includes a dependent measure to capture sustained engagement with diversity such as living in a culturally themed residence hall or joining a culturally themed organization. The fit indices for this model were excellent (NFI=.958, NNFI=.950, CFI=.961, RMSEA=.055, χ^2/df=11.65), and I proceeded with a complete analyses for a SEM on the entire dataset (n=3950). The fit indices did not improve, indicating the full SEM did not fit the data any better than the measurement model (NFI=.946, NNFI=.937, CFI=.950, RMSEA=.053, χ^2/df=12.21). EQS recommended several theoretically sound adjustments to the full SEM model, which I made. These included adding a path from "Predisposition to participate in diversity activities in college" to "Perceived racial tension on campus," and a path from "Perceived racial tension on campus" to "Anxiety interacting with diverse others." After making these adjustments, the fit indices improved (NFI=.957, NNFI=.951, CFI=.961, RMSEA=.047, χ^2/df=9.79), and I completed analyses on a fully constrained three-group comparison model on the African American, Latina/o, and White sub-samples to test for group invariance. The fit indices for the fully constrained three-group comparison model were adequate (NFI=.932, NNFI=.943, CFI=.949, RMSEA=.049, χ^2/df=3.76). EQS recommended releasing several constraints, including the path from proportion of whites in the pre-college environment to positive interactions with diverse others. Since the fit indices improved only slightly (NFI=.935, NNFI=.947, CFI=.951, RMSEA=.049,

Figure 4.3 Modeling Sustained Participation in Cocurricular Diversity Engagement



χ^2/df=3.74), I report on the fully constrained three-group comparison sustained diversity engagement model with no paths released henceforward.

The primary differences between the models are the dependent measures (student participation, and engagement in cocurricular diversity programs) and the paths in each model. For the discussions/workshops model only a was released from the path from proportion of Whites in pre-college environments to positive interactions with diverse peers in college. EQS further recommended adding a path from pre-college predisposition to participate in diversity activities to perceived racial tension for both models. However, for the sustained engagement with diversity model, EQS recommended adding a path from perceived racial tension on campus to anxiety with diversity peers in college. The models discussed in the results and discussion sections represent the final three-group comparison SEMs for each measure of diversity engagements—diversity discussions/workshop participation and sustained diversity engagement.

Results

Diversity Engagement

Three of the five factors and items depicted in Figure 4.2 had significant positive, direct effects on student participation in cocurricular diversity discussions/workshops (Model I). The strongest of these was students' predispositions to participate in diversity activities at the beginning of college. Positive interactions with diverse peers in college had a positive, moderately strong direct effect on students' participation in campus workshops/discussions on race for all three racial/ethnic groups. In the sustained diversity engagement model (Model II), positive interactions with diverse peers had a positive,

direct effect on students' sustained engagements with cocurricular diversity programs across all three groups. However, the effect of positive interactions with diverse peers on students' sustained engagements with cocurricular diversity programs had a stronger effect on diversity engagement than pre-college predisposition to participate in diversity activities (see Tables 4.3 and 4.4). Both models supported my second hypothesis about the relationship between students' predispositions to participate in diversity activities and their participating in cocurricular diversity programs.

This diversity discussions and workshops SEM (Model I) did not detect any significant direct effect of proportion of Whites in the pre-college environments on participation in cocurricular diversity programs for any of the three racial/ethnic groups, contrary to my first hypothesis. In contrast, Model II detected a significant negative direct effect for all three groups, in partial support of my first hypothesis where I posited this effect would be negative for African American and Latinos and positive for Whites. The effect of perceived racial tension on campus on sustained engagement with cocurricular diversity programs was the same for both models—positive direct effects for all three racial/ethnic groups with no differences across groups.

For all groups, there was a very modest direct effect of perceived racial tension on campus on the dependent measure in Model I. The positive effect of pre-college predisposition to participate in diversity activities was mediated by perceived racial tension similarly across all three groups. Positive interactions with diverse others mediated the effects of anxiety with diverse peers, supporting my fourth hypothesis. Students' predispositions to participate in diversity activities at the beginning of college have an effect on their participation in diversity workshop/discussions at the end of the

second year in college. However, positive interactions with diverse peers in college and perceived racial tension on campus mediate this relationship.

For African American, Latina/o, and White students, relationships between factors were similar and in almost all cases, the strength of relationships did not differ across racial/ethnic groups, with the exception of the proportion of whites in pre-college environments, on students' participation in cocurricular diversity programs. No significant direct effects were detected for the proportion of Whites in pre-college environments on students' level of participation in campus sponsored diversity workshops/discussions for any of the racial/ethnic groups, contrary to my first hypothesis. This was also the case for direct effects of anxiety with diverse others on the dependent measure.

Positive Interactions with Diverse Others

As found in Chapter III, pre-college predisposition to diversity had the strongest direct effects on students' positive interactions with diverse others for both models. In Model I the proportion of Whites in pre-college environments had direct negative effects on students' positive interactions with diverse others in college. For Model II, the direct negative effect of the number of Whites in pre-college environments on positive interactions with diverse others in college was consistent across all three racial/ethnic groups. These findings partially support my third hypothesis as a relationship between these factors existed. However, the part if my hypothesis that posited there would be differences between students of color and White students was not confirmed. The effects of students' anxiety with diverse peers in college on students' interactions with their ethnically/racially different peers was relatively the same for both models: a negative

effect for each of the three racial/ethnic groups (see Tables 4.3, 4.4.). Additionally, in both models there was a modest, positive direct effect of students' perceptions of racial tension on their campuses on their interactions with ethnically/racially diverse others, which was similar across all groups at the end of the second year of college.

Predisposition to Participate in Diversity Activities

The proportion of Whites in pre-college environments had a direct, negative effect on all students' pre-college predispositions to participate in diversity activities, regardless of the type of diversity engagement, supporting my first hypothesis.

Racial Tension and Anxiety with Diverse Others

For all students, there was a positive relationship between predisposition to participate in diversity activities and perceived racial tension in both models. Pre-college predisposition to participate in diversity activities mediated the effect of the proportion of Whites in pre-college environments on perceived racial tension on campus for all three racial/ethnic groups, and this was consistent across both models. In Model II a path from perceived racial tension on campus to anxiety with diverse peers in college was added per EQS's recommendation (see Figure 4.3), and direct, positive effects were detected across all three racial/ethnic groups for this relationship. However, this effect was nearly twice as large for Latina/o students than for White and African American students. As with Model I, pre-college predisposition to participate in diversity activities mediates the effect of the proportion of Whites in pre-college environments on perceived racial tension for all three racial/ethnic groups, although in Model II this relationship was no longer significant for African American students.

Table 4.3 ***Direct, Indirect, and Total Effects of Three-Group Comparison Model for Participation in Cocurricular Diversity Discussions/Workshops***

	African Americans n=185			Latina/os n=334			Whites n=2918		
Direct effects	**b**	**B**	**R^2**	**b**	**B**	**R^2**	**b**	**B**	**R^2**
V15 Perceived racial tension on campus			.032			.059			.047
F2 Pre-college predispositions to participate in diversity activities	.259***	.179		.259***	.243		.259***	.217	
F2 Pre-college predispositions to participate in diversity activities			.046			.034			.028
F1 Proportion of Whites in pre-college environment	-.137***	-.213		-.137***	-.185		-.137***	-.167	
F3 Positive interactions with diverse peers in college			.077			.110			.094
F1 Proportion of Whites in pre-college environment	.179***	.172		.179***	.186		-.198***	-.146	
F2 Pre-college predispositions to participate in diversity activities	.353***	.218		.353***	.273		.353***	.215	
V8 Anxiety with diverse peers in college	-.167***	-.101		-.167***	-.114		-.167***	-.102	
V15 Perceived racial tension on campus	.054*	.048		.054*	.044		.054*	.039	
F4 Participation in cocurricular diversity programs			.112			.215			.246
F1 Proportion of Whites in pre-college environment	.011	.014		.011	.018		.011	.016	
F2 Pre-college predispositions to participate in diversity activities	.300***	.243		.300***	.356		.300***	.356	
F3 Positive interactions with diverse peers in college	.116***	.153		.116***	.179		.116***	.227	
V8 Anxiety with diverse peers	.017	.014		.017	.018		.017	.020	
V15 Perceived racial tension on campus	.072***	.084		.072***	.091		.072***	.101	

*p<.05, ***p<.001

Note: All paths were constrained to be equal across groups with exceptions noted by differences in unstandardized coefficients (freely estimated paths).
Three group comparison structural model fit indices: NNFI = .935, NNFI = .947, CFI = .951, RMSEA = .049, X^2/df = 3.74.

Table 4.3 (continued) ***Direct, Indirect, and Total Effects of Three-Group Comparison Model for Participation in Cocurricular Diversity Discussions/Workshops***

	African Americans n=185		Latina/os n=334		Whites n=2918	
Indirect effects	**b**	**B**	**b**	**B**	**b**	**B**
V15 Perceived racial tension on campus						
F1 Proportion of Whites in pre-college environment	-.036***	-.038	-.036***	-.045	.036***	-.036
F3 Positive interactions with diverse peers at college						
F1 Proportion of Whites in pre-college environment	-.050***	-.048	-.050***	-.052	-.050***	-.037
F2 Pre-college predispositions to participate in diversity activities	.014*	.009	.014*	.011	.014*	.008
F4 Participation in cocurricular diversity programs						
F1 Proportion of Whites in pre-college environment	-.029**	-.036	-.029**	-.046	-.073***	-.105
F2 Pre-college predispositions to participate in diversity activities	.061***	.050	.061***	.073	.061***	.073
V8 Anxiety with diverse peers in college	-.019***	-.016	-.019***	-.020	-.019***	-.023
V15 Perceived racial tension on campus	.006*	.007	.006*	.008	.006*	.009

Total effects	**b**	**B**	**b**	**B**	**b**	**B**
F4 Participation in cocurricular diversity programs						
F1 Proportion of Whites in pre-college environment	-.018	-.022	-.018	-.028	-.062***	-.089
F2 Pre-college predispositions to participate in diversity activities	.361***	.293	.361***	.428	.361***	.429
F3 Positive interactions with diverse peers in college	.116***	.153	.116***	.179	.116***	.227
V8 Anxiety with diverse peers	-.002	-.002	-.002	-.002	-.002	-.003
V15 Perceived racial tension on campus	.078***	.092	.078***	.098	.078***	.110

*p<.05, **p<.01, ***p<.001

Note: All paths were constrained to be equal across groups with exceptions noted by differences in unstandardized coefficients (freely estimated paths).
Three group comparison structural model fit indices: NNFI = .935, NNFI = .947, CFI = .951, RMSEA = .049, X^2/df = 3.74.

Table 4.4 ***Direct, Indirect, and Total Effects of Three-Group Comparison Model for Sustained Cocurricular Diversity Engagement***

	African Americans n=186			Latina/os n=335			Whites n=2939		
Direct effects	**b**	**B**	**R^2**	**b**	**B**	**R^2**	**b**	**B**	**R^2**
V7 Anxiety with diverse peers in college			.041			.077			.021
V14 Perceived racial tension on campus	.138**	.202		.230***	.278		.122***	.146	
V14 Perceived racial tension on campus			.033			.057			.048
F2 Pre-college predispositions to participate in diversity activities	.267*	.182		.252***	.239		.261***	.220	
F2 Pre-college predispositions to participate in diversity activities			.029			.021			.033
F1 Proportion of Whites in pre-college environment	-.143***	-.171		-.143***	-.144		-.143***	-.181	
F3 Positive interactions with diverse peers in college			.068			.099			.077
F1 Proportion of Whites in pre-college environment	-.118***	-.083		-.118***	-.090		-.118***	-.093	
F2 Pre-college predispositions to participate in diversity activities	.352***	.207		.352***	.265		.352***	.218	
V7 Anxiety with diverse peers in college	-.172***	-.101		-.172***	-.113		-.172***	-.106	
V14 Perceived racial tension on campus	.054*	.046		.054*	.043		.054*	.039	
F4 Participation in cocurricular diversity programs			.477			.691			.742
F1 Proportion of Whites in pre-college environment	-.031**	-.059		-.031**	-.071		-.031**	-.081	
F2 Pre-college predispositions to participate in diversity activities	.159***	.252		.159***	.359		.159***	.325	
F3 Positive interactions with diverse peers in college	.207***	.559		.207***	.619		.207***	.685	
V7 Anxiety with diverse peers	-.010	-.017		-.010	-.021		-.010	-.021	
V14 Perceived racial tension on campus	.035***	.081		.035***	.083		.035***	.084	

*p<.05, **p<.01, ***, p<.001

Note: All paths were constrained to be equal across groups. Three group comparison structural model fit indices: NNFI = .932, NNFI = .943, CFI = .949, RMSEA = .049, X^2/df = 3.78.

Table 4.4 (continued) ***Direct, Indirect, and Total Effects of Three-Group Comparison Model for Sustained Cocurricular Diversity Engagement***

	African Americans n=186		Latina/os n=335		Whites n=2939	
Indirect effects	**b**	**B**	**b**	**B**	**b**	**B**
V7 Anxiety with diverse peers in college						
F1 Proportion of Whites in pre-college environment	-.005	-.006	-.008**	-.010	-.005***	-.006
F2 Pre-college predispositions to participate in diversity activities	.037	.037	.058**	.066	.032***	.032
V14 Perceived racial tension on campus						
F1 Proportion of Whites in pre-college environment	-.038	-.031	-.036***	-.034	-.037***	-.040
F3 Positive interactions with diverse peers in college						
F1 Proportion of Whites in pre-college environment	-.051***	-.036	-.051***	-.039	-.051***	-.040
F2 Pre-college predispositions to participate in diversity activities	.008	.005	.004	.003	.009	.005
V14 Perceived racial tension on campus	-.024*	-.020	-.040***	-.032	-.021***	-.015
F4 Participation in cocurricular diversity programs						
F1 Proportion of Whites in pre-college environment	-.059***	-.112	-.059***	-.134	-.059***	-.153
F2 Pre-college predispositions to participate in diversity activities	.083***	.132	.082***	.184	.083***	.170
V7 Anxiety with diverse peers in college	-.036***	-.056	-.036***	-.070	-.036***	-.072
V14 Perceived racial tension on campus	.005	.011	.000	.001	.005	.013

Total effects	**b**	**B**	**b**	**B**	**b**	**B**
F4 Participation in cocurricular diversity programs						
F1 Proportion of Whites in pre-college environment	-.090***	-.171	-.090***	-.205	-.090***	-.234
F2 Pre-college predispositions to participate in diversity activities	.243***	.384	.241***	.543	.243***	.496
F3 Positive interactions with diverse peers in college	.207***	.559	.207***	.619	.207***	.685
V7 Anxiety with diverse peers	-.046***	-.073	-.046***	-.091	-.046***	-.094
V14 Perceived racial tension on campus	.039***	.092	.035**	.084	.040***	.098

*p<.05, ***p<.001

Note: All paths were constrained to be equal across groups. Three group comparison structural model fit indices: NNFI = .932, NNFI = .943, CFI = .949, RMSEA = .049, X^2/df = 3.78.

Limitations

This study examined a phenomenon within a very specific institutional context for a particular population of student and focuses solely on traditional-age college students. Specifically, the only institutions included in the study were flagship public campuses; however, the same phenomena may operate in unique ways at private colleges or at other types of institutions (BA, Masters, etc.) Additionally, minority-serving institutions, which serve growing numbers of students of color, were not included in these analyses. Lastly, Asian American students were not included in these analyses and, as such, a piece of the story of the experiences of students of color is missing from this study.

Discussion

This study examined the interrelationships between students' pre-college and college experiences with diversity and the effects such factors and relationships have on students' participation in cocurricular diversity programs through the second year of college. In order to explore these differences, I disaggregated the SEM analyses by race to test for group variance and tested two distinct conceptualizations of student engagement with cocurricular diversity programs. Model I's dependent measure was comprised of students' participation in campus-organized discussions on racial/ethnic issues and diversity awareness workshops. Model II included a more complex dependent measure, which captured sustained engagement with diversity through living in culturally themed residence halls and/or involvement in student organizations that promote cultural diversity. The results affirm the importance of positive interactions with diverse others in accord with previous research (Antonio, 2004; Engberg, 2005; Gurin et al. 2003; Saenz el al. 2007). Moreover, such interactions can mediate the potential negative effects of

predominantly white pre-college environments and perceived racial tension (see Chapter III, Gloria et al., 2001; Milem et al., 2004; Nunez, 2005; Orfield, et al., 1997; Orfield & Lee, 2006; Saenz, 2005; Stephan & Stephan, 1989).

I hypothesized that the relationship between the proportion of Whites in the pre-college environments and a pre-college predisposition to participate in diversity activities would be negative for White students and positive for African American and Latina/o students based on the results in Chapter III. However, results reveal that this relationship is negative and statistically significant for all students. In other words, the higher the number of White students in a student's neighborhood, high school, and adolescent peer group, the less likely the student is to participate in diversity activities during college. This finding supports previous research about long-term effects of segregated secondary educational environments (see Orfield, Bachmeier, & Eitle, 1997; Orfield & Lee, 2006). Nonetheless, the proportion of Whites in the pre-college environments did not have a significant direct relationship to students' participation in cocurricular diversity workshops and discussions. However, the proportion of Whites in pre-college environments did have negative effects on students' *sustained* engagement with cocurricular diversity programs. College students growing up in predominantly White neighborhoods with mostly White peers in mostly White high schools are less likely to participate in organizations which promoted cultural diversity or to live with diverse others. Additionally, the proportion of Whites in the pre-college environments had an effect on participating in cocurricular programs, mediated by meaningful interactions with diverse peers. Further, having meaningful interactions with diverse others mediated both anxiety about interacting with diverse others and perceived racial tension on

campus. As with previous research, this study highlights the positive outcomes college students experience because of interacting with diverse others (see Antonio, 2004; Chapter III; Engberg, 2005). Given the number of factors mediated by positive interactions with diverse others, the importance of such interactions is amplified because of the multi-layered benefits.

I hypothesized that for African American and Latina/o students, the number of Whites in their pre-college peer groups, high schools, and neighborhoods would have a positive effect on these students' predisposition to participate in diversity activities. This hypothesis was based on the notion that African American and Latina/o students who had spent more time with their White peers before college would be more inclined to participate in diversity activities in college, and that the reverse would be true of White students coming from predominantly white pre-college environments (see Stephan & Stephan, 1989). My hypothesis was supported for White students but not for African American and Latina/o students, as this relationship was negative for all students in both models.

Both models supported my initial hypothesis that the relationship between student pre-college orientation towards diversity activities and their participation in such activities in college would be direct and positive for African American, Latina/o, and White students. While I did not hypothesize about indirect effects, the sustained diversity SEM results for both models revealed that an indirect effect of predisposition to engage in diversity related activities in college on anxiety with diverse peers existed for Latina/o and White students but not for African American students. This is important given that students' predispositions to participate in diversity activities at the beginning of college

serves as a control measure for the dependent measure—students' engagement with diversity activities during the second year of college. The inclusion of students' pre-college orientation towards diversity activities in the model, as was done in Chapter III, allows for a stronger test of the relationship between positive interactions with diverse peers and students' engagement in diversity activities at the end of the second year in college.

In both models, positive interactions with diverse peers in college had a positive effect on diversity engagement for all three racial/ethnic groups, supporting my hypothesis. In contrast to the findings in Chapter III and those for Model I, in Model II predispositions to participate in diversity activities, which served as a control measure, did not have the strongest effect on the outcome. For Model II, the factor with the strongest effect on the outcome was positive interactions with diverse others in college. This distinction signals the relative influence of pre-college predisposition to participate in cocurricular diversity activities and highlights the critical importance of institutions fostering cross-racial interactions as a way to counteract the negative effects of segregated pre-college environments.

This study revealed a distinct set of relationships that further explore Gurin et al.'s (2002) emphasis on the importance of substantive and meaningful interactions with diverse peers in college. Because sustained interactions may be necessary to evoke changes in students' perspectives on diverse others, it may be that meaningful interactions are a proxy for sustained interactions. Students having meaningful interactions may be contingent on such interactions being sustained over time, keeping with Gurin et al.'s findings that interactions must be substantive in order for students to

educationally benefit from diversity. For example, students in culturally themed residential programs are regularly engaged with diversity in a cocurricular setting and may receive a greater benefit from interactions with racially/ethnically different peers. By contrast, students who attend a one-time campus workshop/discussion on race may receive fewer educational benefits from interacting with their diverse peers because their interactions are not sustained over time. The latter group of students may be less likely to develop sustained relationships with diverse others. The intimacy of living with diverse others and interacting with them to complete tasks associated with sustained involvement in a student organization may be keys to the educational benefits of diversity. These results should be interpreted with caution as the survey data used in this study did not measure *how* students came to live with diverse others or participate in culturally themed student organizations.

These analyses sought to extend the work of Chapter III by completing a three-group comparison, rather than comparing White students with an aggregated group of students of color. However, disaggregating by racial ethnic group did not help to explain Gurin et al.'s (2002) findings that White students received the most benefits from being in diverse learning environments and campuses. The group differences found were between African students and their Latina/o and White counterparts. Based in part on the findings from Chapter III of differences between students of color and White students, my hypothesis reflected an assumption that African American and Latina/o students would have more in common with one another than with their White counterparts, which was not supported. The number of Whites in students' pre-college environments did not have the hypothesized effect on positive interactions with diverse others or engagement

in diversity activities for African American, Latina/o, and White students. My hypothesis posited that African Americans and Latina/os would be similar across all relationships. This was true for Model I. However, Model II revealed one set of relationships that were inconsistent for African American and Latina/o students. The indirect effects of proportion of Whites in students' pre-college environments on both anxiety with diverse others in college and perceived racial tension were detected for Latina/o and Whites but not African Americans. This difference is subtle but worth exploring in future studies. It may be that African Americans' culturally distinct pre-college life experiences translate into equally distinct college experiences with regard to their perception of the campus climate for race and ethnicity.

This study supports previous research which found that having meaningful interactions with diverse others was important. Moreover, the results of both models, individually and collectively, shed more light on the relationships between college student interactions with their peers and their engagement in campus activities. This study found that interactions with diverse peers during the first two years of college are particularly key for sustained engagement with diversity activities. Although each model tested for differences across racial/ethnic groups, differences between students of color and their White counterparts noted in Gurin, Dey, Hurtado, and Gurin (2002) and Chapter III were not illuminated. Nonetheless, this study extends the findings of Nelson-Laird, Engberg, and Hurtado's (2005) examination of the importance of sanctioned support for racial/ethnic diversity through the formal curriculum in that this study's findings suggest how critical and important sanctioned support is for activities outside of the formal classroom.

It is clear in comparing the two models that when engagement with cocurricular diversity activities is more sustained in nature, interactions with diverse peers in college becomes key to facilitating student engagement, nearly doubling the effects. This may be due to cocurricular diversity programs meeting Allport's (1954) conditions for intergroup contact that results in increased racial understanding and awareness. Given Stephan et al.'s (2005) findings about the effect of negative contact on students' racial attitudes, it may be that providing students with opportunities to interact with diverse others over time is what is needed for students to experience Piaget's disequilibrium cited by Gurin et al. (2002). Opportunities to engage with diverse other in a sustained manner may be a key piece of the puzzle of why students experience educational benefits from racial/ethnical diversity.

Conclusion and Significance of this Study

With recent Supreme Court rulings restricting the use of race and ethnicity in K-12 education but upholding diversity in higher education as a compelling interest, more research is needed to understand how students' pre-college interactions with diverse others affects their college experiences and outcomes. Moreover, further empirical investigations are needed on the effectiveness of specific programs and initiatives designed to facilitate cross-racial and ethnic interactions and the educational benefits to students engaged in campus diversity programs and initiatives. More research is needed to understand the complexities of how meaningful interactions with diverse peers may result in other key outcomes for college students.

Cocurricular diversity programs represent a realization and nexus of the broader evidence from higher education scholarship on the educational value of a diverse learning

environment, while also supporting the importance of engagement in out-of-classroom activities and experiences with overall college engagement. A significant aspect of the findings from this study is the importance of meaningful, quality interactions with diverse others. Most critics of educationally diverse environments are not aware that advocates for diversity argue that interactions must be purposeful. This, and previous research, supports that merely situating a group of dissimilar individuals together in the college context will not result in beneficial educational results for students; instead, such interactions must be meaningful. Additionally, meaningful interactions with diverse peers mediate anxiety with diverse peers, also supported by previous research. Positive interactions with diverse peers also has a positive relationship to participation in cocurricular diversity programs, highlighting the critical responsibilities institutional actors have for creating opportunities for students to have sustained and meaningful cross-racial interactions through programs such as culturally themed living learning programs and encouraging students to join student organizations which focus on racial and ethnic diversity.

Understanding more about different types of cocurricular diversity engagement would allow administrators and practitioners more insight into the types of programs students are attached to and become engaged in, and which programs make a difference in students' ability to interact effectively across race/ethnicity. This is a key piece of information in a context where budgets are restricted and student affairs professionals must justify programs. There is a hostile climate for race-related and diversity programs and those responsible for facilitating meaningful cross-racial interactions or directing race related programs may find this study useful as it underscores the importance of their

programs in helping students take advantage of the benefits associated with being in a college environment with a diverse student body.

Appendix 4.1

Matrix of Correlations among Participation in Cocurricular Diversity Workshops/Discussions Variables (African American, Latina/o, and White Students)

Variable name	v1	v2	v3	v4	v5	v6	v8	v9	v10	v11	v12	v13	v14	v15	v17	v18	Weight
v1 Racial composition of neighborhood grew up in	1.00																
v2 Racial composition of high school	.61	1.00															
v3 Racial composition of friends in high school	.63	.70	1.00														
v4 Participate in activities of my own culture in college	-.22	-.16	-.24	1.00													
v5 Take diversity course 1st yr of college	-.08	-.04	-.12	.34	1.00												
v6 Join cultural diversity organization in college	-.15	-.11	-.21	.44	.46	1.00											
v8 Anxiety of interactions with different races	.02	.02	.03	.01	.00	.02	1.00										
v9 Dined or shared a meal	-.11	-.10	-.18	.09	.06	.16	-.08	1.00									
v10 Meaningful/honest discussions about race outside of class	-.11	-.09	-.18	.13	.14	.23	-.06	.57	1.00								
v11Shared personal feelings and problems	-.08	-.07	-.14	.09	.09	.19	-.07	.60	.58	1.00							
v12 Studied or prepared for class	-.12	-.10	-.16	.11	.05	.14	-.06	.47	.42	.51	1.00						
v13 Socialized or partied	-.04	-.02	-.08	.07	.07	.13	-.08	.57	.45	.58	.51	1.00					
v14 Intellectual discussions outside of class	-.08	-.06	-.14	.08	.08	.19	-.07	.57	.63	.66	.61	.63	1.00				
v15 There is a lot of racial tension on the University campus	-.04	-.03	-.07	.15	.13	.17	.15	.04	.12	.05	.05	.02	.06	1.00			
v17 Participated in campus discussions on racial issues	-.11	-.06	-.12	.22	.22	.29	.01	.15	.29	.20	.19	.18	.24	.20	1.00		
v18 Participated in diversity awareness workshops	-.08	-.05	-.09	.18	.21	.26	.02	.13	.24	.18	.14	.16	.19	.16	.63	1.00	
Weight institutional longitudinal adjusted weight	-.09	-.04	-.09	.06	-.06	-.07	-.07	-.02	-.01	-.10	.00	-.04	-.02	.00	.01	-.02	1.00

Appendix 4.2

Matrix of Correlations among Participation in Cocurricular Diversity Workshops/Discussions Variables (African American Students)

Variable name	v1	v2	v3	v4	v5	v6	v8	v9	v10	v11	v12	v13	v14	v15	v17	v18	Weight
v1 Racial composition of neighborhood grew up in	1.00																
v2 Racial composition of high school	.45	1.00															
v3 Racial composition of friends in high school	.50	.65	1.00														
v4 Participate in activities of my own culture in college	-.11	-.05	-.18	1.00													
v5 Take diversity course 1st yr of college	-.15	.05	-.08	.38	1.00												
v6 Join cultural diversity organization in college	.03	.06	.03	.35	.40	1.00											
v8 Anxiety of interactions with different races	.04	-.06	-.09	.04	.04	.05	1.00										
v9 Dined or shared a meal	.20	.16	.26	-.14	-.13	.00	-.14	1.00									
v10 Meaningful/honest discussions about race outside of class	.10	.11	.09	.10	.11	.16	-.05	.48	1.00								
v11Shared personal feelings and problems	.13	.15	.21	.02	-.08	.11	-.07	.48	.53	1.00							
v12 Studied or prepared for class	.11	.00	.08	.14	.06	.12	-.01	.38	.32	.35	1.00						
v13 Socialized or partied	.20	.22	.26	.00	-.11	.07	-.15	.54	.48	.61	.37	1.00					
v14 Intellectual discussions outside of class	.11	.20	.23	.08	.08	.14	-.05	.50	.65	.56	.35	.63	1.00				
v15 There is a lot of racial tension on the University campus	-.06	-.04	-.10	.15	.21	.15	.26	-.19	.04	-.12	-.18	-.11	-.07	1.00			
v17 Participated in campus discussions on racial issues	-.11	-.18	-.21	.29	.28	.23	.10	-.11	.14	.02	.14	.09	.18	.21	1.00		
v18 Participated in diversity awareness workshops	-.09	-.09	-.08	.22	.28	.26	.05	-.04	.19	.06	.07	.07	.14	.22	.63	1.00	
Weight institutional longitudinal adjusted weight	-.10	-.08	-.11	.02	.04	-.13	-.15	.02	.03	-.07	-.01	.02	.00	-.01	-.01	-.07	1.00

Appendix 4.3

Matrix of Correlations among Participation in Cocurricular Diversity Workshops/Discussions Variables (Latina/o Students)

Variable name	v1	v2	v3	v4	v5	v6	v8	v9	v10	v11	v12	v13	v14	v15	v17	v18	Weight
v1 Racial composition of neighborhood grew up in	1.00																
v2 Racial composition of high school	.64	1.00															
v3 Racial composition of friends in high school	.61	.70	1.00														
v4 Participate in activities of my own culture in college	-.16	-.03	-.22	1.00													
v5 Take diversity course 1st yr of college	-.04	-.01	-.13	.45	1.00												
v6 Join cultural diversity organization in college	-.04	.05	-.10	.55	.58	1.00											
v8 Anxiety of interactions with different races	.02	.03	-.03	.11	.07	.11	1.00										
v9 Dined or shared a meal	.03	.06	.01	.11	.17	.27	-.02	1.00									
v10 Meaningful/honest discussions about race outside of class	.04	.10	-.03	.21	.31	.33	.03	.55	1.00								
v11Shared personal feelings and problems	.10	.13	.10	.10	.22	.29	-.02	.57	.61	1.00							
v12 Studied or prepared for class	.01	-.01	-.04	.15	.14	.23	-.08	.45	.43	.51	1.00						
v13 Socialized or partied	.07	.12	.07	.09	.12	.17	-.10	.62	.46	.53	.46	1.00					
v14 Intellectual discussions outside of class	.09	.11	.04	.09	.21	.30	-.04	.54	.68	.64	.55	.57	1.00				
v15 There is a lot of racial tension on the University campus	.01	.04	-.01	.23	.23	.20	.25	.14	.21	.20	.10	.09	.18	1.00			
v17 Participated in campus discussions on racial issues	-.04	.04	-.07	.21	.33	.34	.10	.19	.37	.30	.20	.24	.28	.26	1.00		
v18 Participated in diversity awareness workshops	-.04	.04	-.08	.19	.31	.30	.11	.20	.35	.26	.18	.19	.26	.25	.68	1.00	
Weight institutional longitudinal adjusted weight	-.02	-.05	-.03	-.06	-.03	-.06	.09	-.05	-.08	-.06	.01	-.04	-.08	.01	.00	-.01	1.00

Appendix 4.4

Matrix of Correlations among Participation in Cocurricular Diversity Workshops/Discussions Variables (White Students)

Variable name	v1	v2	v3	v4	v5	v6	v8	v9	v10	v11	v12	v13	v14	v15	v17	v18	Weight
v1 Racial composition of neighborhood grew up in	1.00																
v2 Racial composition of high school	.56	1.00															
v3 Racial composition of friends in high school	.54	.65	1.00														
v4 Participate in activities of my own culture in college	-.09	-.08	-.11	1.00													
v5 Take diversity course 1st yr of college	-.02	-.01	-.06	.30	1.00												
v6 Join cultural diversity organization in college	-.08	-.07	-.16	.38	.43	1.00											
v8 Anxiety of interactions with different races	.02	.02	.05	.00	-.01	.01	1.00										
v9 Dined or shared a meal	-.11	-.10	-.20	.07	.04	.14	-.08	1.00									
v10 Meaningful/honest discussions about race outside of class	-.11	-.09	-.18	.09	.11	.21	-.07	.57	1.00								
v11Shared personal feelings and problems	-.10	-.09	-.18	.07	.08	.18	-.08	.61	.57	1.00							
v12 Studied or prepared for class	-.10	-.07	-.14	.07	.02	.10	-.06	.47	.41	.51	1.00						
v13 Socialized or partied	-.07	-.04	-.12	.06	.07	.13	-.08	.56	.45	.58	.52	1.00					
v14 Intellectual discussions outside of class	-.09	-.08	-.17	.07	.06	.17	-.07	.57	.62	.67	.63	.64	1.00				
v15 There is a lot of racial tension on the University campus	-.01	-.02	-.04	.11	.10	.15	.13	.04	.11	.04	.05	.02	.05	1.00			
v17 Participated in campus discussions on racial issues	-.05	-.02	-.06	.18	.18	.26	-.01	.16	.29	.20	.17	.18	.24	.17	1.00		
v18 Participated in diversity awareness workshops	-.03	-.01	-.04	.14	.18	.23	.00	.12	.22	.18	.13	.16	.18	.13	.62	1.00	
Weight institutional longitudinal adjusted weight	-.03	.01	-.03	.01	-.10	-.11	-.09	-.04	-.03	-.13	-.02	-.05	-.03	-.02	-.02	-.04	1.00

Appendix 4.5

Matrix of Correlations among Sustained Cocurricular Diversity Engagement Variables (African American, Latina/os, and White Students)

Variable name	v1	v2	v3	v4	v5	v6	v7	v8	v9	v10	v11	v12	v13	v14	v18	v19	Weight
v1 Racial composition of neighborhood grew up in	1.00																
v2 Racial composition of high school	.61	1.00															
v3 Racial composition of friends in high school	.62	.69	1.00														
v4 Participate in activities of my own culture in college	-.22	-.16	-.24	1.00													
v5 Take diversity course 1st yr of college	-.08	-.04	-.12	.34	1.00												
v6 Join cultural diversity organization in college	-.15	-.11	-.21	.44	.45	1.00											
v7 Anxiety of interactions with different races	.02	.02	.03	.01	.00	.02	1.00										
v8 Dined or shared a meal	-.10	-.10	-.17	.09	.06	.16	-.08	1.00									
v9 Meaningful/honest discussions about race outside of class	-.11	-.09	-.17	.13	.14	.23	-.06	.57	1.00								
v10Shared personal feelings and problems	-.08	-.07	-.13	.09	.09	.19	-.07	.60	.58	1.00							
v11 Studied or prepared for class	-.12	-.10	-.16	.11	.04	.13	-.06	.47	.42	.51	1.00						
v12 Socialized or partied	-.04	-.02	-.07	.06	.07	.13	-.08	.57	.45	.58	.51	1.00					
v13 Intellectual discussions outside of class	-.07	-.05	-.13	.08	.08	.18	-.07	.56	.62	.66	.61	.63	1.00				
v14 There is a lot of racial tension on the University campus	-.04	-.03	-.06	.14	.13	.16	.15	.04	.12	.05	.05	.02	.06	1.00			
v18 Attended events sponsored other racial/ethnic groups	-.13	-.08	-.17	.18	.15	.24	-.04	.33	.37	.34	.33	.36	.39	.12	1.00		
v19 Sustained participation in diversity activities	-.09	-.07	-.13	.19	.12	.20	.01	.28	.28	.25	.21	.22	.23	.13	.27	1.00	
Weight institutional longitudinal adjusted weight	-.09	-.04	-.09	.06	-.06	-.07	-.07	-.02	-.01	-.10	.00	-.04	-.02	.00	-.03	-.01	1.00

Appendix 4.6

Matrix of Correlations among Sustained Cocurricular Diversity Engagement Variables (African American Students)

Variable name	v1	v2	v3	v4	v5	v6	v7	v8	v9	v10	v11	v12	v13	v14	v18	v19	Weight
v1 Racial composition of neighborhood grew up in	1.00																
v2 Racial composition of high school	.45	1.00															
v3 Racial composition of friends in high school	.51	.65	1.00														
v4 Participate in activities of my own culture in college	-.11	-.05	-.18	1.00													
v5 Take diversity course 1st yr of college	-.15	.05	-.08	.38	1.00												
v6 Join cultural diversity organization in college	.03	.06	.03	.35	.41	1.00											
v7 Anxiety of interactions with different races	.04	-.06	-.09	.04	.04	.05	1.00										
v8 Dined or shared a meal	.20	.17	.27	-.14	-.13	.00	-.14	1.00									
v9 Meaningful/honest discussions about race outside of class	.10	.11	.09	.10	.11	.16	-.05	.48	1.00								
v10Shared personal feelings and problems	.13	.15	.21	.02	-.08	.11	-.07	.48	.53	1.00							
v11 Studied or prepared for class	.11	.00	.08	.14	.06	.12	-.01	.38	.32	.35	1.00						
v12 Socialized or partied	.20	.23	.27	-.01	-.11	.07	-.15	.54	.48	.61	.37	1.00					
v13 Intellectual discussions outside of class	.11	.20	.23	.08	.07	.14	-.05	.50	.66	.56	.35	.63	1.00				
v14 There is a lot of racial tension on the University campus	-.06	-.04	-.10	.15	.20	.15	.26	-.19	.04	-.12	-.17	-.11	-.07	1.00			
v18 Attended events sponsored other racial/ethnic groups	.03	.08	-.01	.13	.18	.14	.00	.26	.39	.31	.17	.40	.43	.17	1.00		
v19 Sustained participation in diversity activities	.06	.06	.07	.17	.06	.16	.02	.16	.21	.15	.22	.17	.21	.14	.38	1.00	
Weight institutional longitudinal adjusted weight	-.10	-.08	-.10	.02	.04	-.13	-.15	.02	.03	-.07	-.01	.02	.00	-.01	-.03	-.03	1.00

Appendix 4.7

Matrix of Correlations among Sustained Cocurricular Diversity Engagement Variables (Latina/o Students)

Variable name	v1	v2	v3	v4	v5	v6	v7	v8	v9	v10	v11	v12	v13	v14	v18	v19	Weight
v1 Racial composition of neighborhood grew up in	1.00																
v2 Racial composition of high school	.64	1.00															
v3 Racial composition of friends in high school	.62	.70	1.00														
v4 Participate in activities of my own culture in college	-.16	-.03	-.22	1.00													
v5 Take diversity course 1st yr of college	-.04	-.01	-.13	.45	1.00												
v6 Join cultural diversity organization in college	-.04	.05	-.10	.55	.57	1.00											
v7 Anxiety of interactions with different races	.02	.03	-.03	.11	.07	.11	1.00										
v8 Dined or shared a meal	.02	.06	.01	.11	.17	.27	-.02	1.00									
v9 Meaningful/honest discussions about race outside of class	.04	.10	-.03	.21	.31	.33	.03	.56	1.00								
v10Shared personal feelings and problems	.10	.13	.10	.10	.22	.30	-.02	.57	.61	1.00							
v11 Studied or prepared for class	.01	-.01	-.04	.15	.14	.23	-.08	.44	.43	.51	1.00						
v12 Socialized or partied	.07	.12	.07	.09	.12	.17	-.10	.62	.46	.53	.46	1.00					
v13 Intellectual discussions outside of class	.09	.11	.04	.09	.21	.30	-.04	.54	.68	.64	.55	.57	1.00				
v14 There is a lot of racial tension on the University campus	.01	.04	-.01	.23	.23	.20	.25	.14	.21	.20	.10	.09	.18	1.00			
v18 Attended events sponsored other racial/ethnic groups	-.03	.03	-.10	.22	.27	.34	.00	.41	.47	.46	.40	.44	.47	.18	1.00		
v19 Sustained participation in diversity activities	-.04	.01	-.06	.23	.29	.31	.14	.21	.21	.21	.14	.16	.18	.19	.27	1.00	
Weight institutional longitudinal adjusted weight	-.02	-.05	-.03	-.06	-.03	-.06	.09	-.05	-.08	-.06	.01	-.04	-.08	.01	-.07	-.04	1.00

Appendix 4.8

Matrix of Correlations among Sustained Cocurricular Diversity Engagement Variables (White Students)

Variable name	v1	v2	v3	v4	v5	v6	v7	v8	v9	v10	v11	v12	v13	v14	v18	v19	Weight
v1 Racial composition of neighborhood grew up in	1.00																
v2 Racial composition of high school	.56	1.00															
v3 Racial composition of friends in high school	.53	.65	1.00														
v4 Participate in activities of my own culture in college	-.09	-.08	-.11	1.00													
v5 Take diversity course 1st yr of college	-.02	-.01	-.06	.30	1.00												
v6 Join cultural diversity organization in college	-.08	-.07	-.16	.38	.43	1.00											
v7 Anxiety of interactions with different races	.02	.02	.06	.00	-.01	.01	1.00										
v8 Dined or shared a meal	-.11	-.10	-.20	.07	.04	.14	-.08	1.00									
v9 Meaningful/honest discussions about race outside of class	-.11	-.09	-.18	.09	.11	.21	-.07	.57	1.00								
v10Shared personal feelings and problems	-.10	-.09	-.18	.07	.08	.18	-.08	.61	.57	1.00							
v11 Studied or prepared for class	-.10	-.07	-.14	.07	.02	.10	-.06	.47	.41	.51	1.00						
v12 Socialized or partied	-.07	-.05	-.12	.06	.07	.13	-.08	.56	.45	.58	.52	1.00					
v13 Intellectual discussions outside of class	-.09	-.08	-.17	.07	.06	.17	-.07	.57	.62	.67	.63	.64	1.00				
v14 There is a lot of racial tension on the University campus	-.01	-.02	-.04	.12	.10	.15	.13	.04	.11	.04	.05	.02	.05	1.00			
v18 Attended events sponsored other racial/ethinc groups	-.11	-.06	-.14	.14	.11	.21	-.06	.32	.36	.33	.33	.35	.38	.10	1.00		
v19 Sustained participation in diversity activities	-.06	-.06	-.10	.15	.09	.17	-.01	.30	.29	.26	.21	.24	.24	.11	.25	1.00	
Weight institutional longitudinal adjusted weight	-.03	.01	-.03	.01	-.10	-.11	-.09	-.04	-.03	-.13	-.03	-.05	-.03	-.02	-.05	-.03	1.00

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CHAPTER V

CONCLUSION

In 2005, AACU sponsored an initiative entitled Making Excellence Inclusive: Diversity, Inclusion, and Institutional Renewal, for which they commissioned several papers examining the connection between excellence and diversity. One of the papers extended the dimensions in a 1998 model from the ASHE-ERIC monograph, *Enacting Diverse Learning Environments* (Hurtado, Milem, Clayton-Pederson, & Allen, 1998). This updated framework accounts for the governmental influences, political context and sociohistorical forces that shape higher education institutional policies for racial and ethnic diversity. More importantly, these models reframed conceptualizations of the campus climate into a framework that presents diversity in higher education as a multi-dimensional construct (Milem, Chang & Antonio, 2005). Central to understanding diversity on college campuses is examining the organizational/structural dimensions of campus climates. Further, linking institutional action to student outcomes adds a missing layer of complexity to the context for race and ethnicity diversity in higher education. As such, I adapted this conceptual framework for my research. The institutional context for diversity at four-year colleges and universities was the focus of Chapter II. Chapter III examined students' interactions with diverse others and their sense of belonging at the end of their second year in college. Finally, Chapter IV again focused on students' meaningful cross-racial interactions, but with dependent measures that captured their

engagement with diversity through cocurricular diversity programs. Taken together, these three studies affirm Milem and colleagues assertions about the complexity of race and ethnicity in higher education.

Expanding and Revising Campus Climate Models

The Milem et al. (2005) model captures many years of higher education research on race and ethnicity. It provides a comprehensive framework with which to examine the multiple forces that influence how institutions increase, manage, and respond to race and ethnicity. The addition of an Organizational/Structural Dimension to the Campus Climate Framework of Milem et al. (2005) underscores the vital roles academic officers, faculty, and student affairs staff play in creating inclusive campus climates. These individuals collectively and individually shape the campus climate with their day-to-day decision making as well as long-term strategic planning. The diversity of the curriculum, tenure policies, organizational decision-making policies, and budget allocations all affect the campus climate. Chapter II revealed that public institutions have a distinct pattern of supporting racial/ethnic diversity. While the measurement models tested in Chapter II support the Milem, Chang, and Antonio (2005) model, my exploratory analyses also suggest the following considerations in future modification to the model:

- Distinctions may exist based on institutional characteristics (e.g. institutional control, geographic region, and size).
- As there appear to be differences between diversity-related initiatives that are faculty-governed and those run by student affairs professionals, distinctions regarding who directs and drives curricular and cocurricular initiatives may reveal interesting nuances about the distinct roles faculty and staff play in contributing to diverse learning environments and inclusive campus climates.
- A new construct that captures students' skills and abilities to function in diverse environments could help to reframe merit and

> more closely align college admissions processes with skills necessary to function in a globally interdependent world. This new concept would directly connect the growing demand for multiculturally competent college graduates to equity of college access and college outcomes.

Future Research

Institutional Commitment to Race and Ethnicity

Chapter II tested the validity of Milem, Chang, and Antonio's (2005) model for the campus climate. Specifically, constructs related to institutional policies, practices, and programs related to racial and ethnic diversity were created through exploratory factor analyses. I identified seven factors that capture how chief academic officers at public and private institutions articulated their institutions' commitment to racial and ethnic diversity. These factors represent how colleges and universities articulate their commitments to racial and ethnic diversity. Using structural equation modeling (SEM) techniques, I performed confirmatory factor analyses to detect differences between public and private campuses' commitment to policies and practices that support racial and ethnic diversity. Public and private institutions do articulate their commitments to racial and ethnic diversity in distinct ways, with publics articulating stronger support for diversity from core leaders, a robust commitment to compositional diversity, and a greater concentration on promoting and rewarding diversity.

The Milem, Chang, and Antonio AACU report complicates assessment and evaluation of racial and ethnic diversity in higher education by making diversity a multi-dimensional construct. Moreover, by positioning organization actions as central to the campus climate for racial and ethnic diversity and connected to every student-related outcome related to the campus climate, this report suggests the need for multi-level data in examining racial and ethnic diversity in higher education. For a more complete

assessment of the campus climate for diversity, multi-level data are required so more concrete distinctions between public and private institutions may be explored. Additionally, most research is student focused and does not examine the link between student outcomes and institutional practices. Without scrutinizing direct links between student outcomes and institutional polices and practices, the complexities of racial and ethnic diversity in the college context will remain unexplored, including distinctions between public and private campuses.

Multi-level data allows for more rigorous quantitative testing and examination of what it means to have racial and ethnic diversity on a college campus. Higher education institutions, policy-makers and, scholars must begin to create data warehouses that contain perspectives and survey data from students, faculty (e.g. lecturers, junior to senior), core leadership (e.g. presidents, provost, deans), student affairs professionals, and other staff. Such data is needed in order to complete the multilevel analyses suggested by the Milem et al., model and supported by the findings in Chapter II. The perspectives of the aforementioned community members collected across a number of institutional characteristics would allow for an examination of the campus climate such that distinctions between idiosyncratic patterns for what racial and ethnic diversity means in the college context and those patterns that are consistent across institutional characteristics (regions, control status, size, or type of degree granted) are established.

The differences between public and private institutions highlight the importance of completing future analyses by type of institutional control. For example, public campuses articulated stronger commitments on three factors pertaining to core leadership support for diversity, increasing the numbers of faculty and staff on campus, and

promoting and rewarding diversity on campus. These were the only factors for which public institutions consistently scored higher than private institutions on specific institutional commitments and actions; for the remaining factors, it was unclear if public campuses or private campuses had a stronger commitment to racial and ethnic diversity. Future research that develops statistical models separately for public and private institutions would begin to detect why such mean differences exist. Moreover, such models must connect the these three factors, as well as the other four included in Chapter IV, to outcomes such as compositional diversity, student and faculty retention outcomes, and a range of other outcomes important to inclusive campus climates. This next step of research on institutional commitment to racial and ethnic diversity will begin to illuminate which articulated commitments, specific programming, and deliberate actions by campuses actually lead to inclusive campus climates.

Institutional responsibility for race/ethnicity is a key step for higher education to respond to demands for graduates with the skills necessary to function in interdependent environments. Public institutions in particular need to be concerned about and invested in democratic merit (Powell, 2006) and acknowledge they have a unique challenge to provide and commit to a diverse learning environment. Although public institutions are typically targets of anti-affirmative action proponents and ballot initiatives restricting the use of race in higher education, the dynamics around race and ethnicity on private campuses are equally important. Restrictions on race-conscious policies have an impact on more than just admissions. In predominantly White environments, the decrease in the number of students of color may translate into lower retention rates for underrepresented

students at a time when the U.S. is experiencing a significant demographic shift that is redefining the term 'minority'.

The measurement models tested in Chapter II supports my application of Milem, Chang, and Antonio's (2005) conceptualization of the assessment of institutional commitment to racial/ethnic diversity. A next possible step would be to complete higher order factor analyses to determine if the policies and practices captured in the seven factors in this study are truly representative of institutional commitment to racial and ethnic diversity. Additionally, smaller groups of factors could be tested as part of several higher order factors. For example, the factors Core leadership support for diversity, Promotes and Rewards diversity related activities and Increasing diversity a priority could be part of a higher order factor that represents organizational decision-making policies that support race and ethnicity in the college context. Additionally, the three factors Curricular initiative support racial/ethnic diversity, Support for creating a diverse learning environment and Values democratic skills in undergraduate education potentially may represent a higher order factor that captures Diversity of the curriculum from the Milem et al. (2005) model.

The results of Chapter II affirm the distinctions between both the institutional actions and articulated commitments related to racial and ethnic diversity. Because public and private campuses had significant mean differences on some items, yet not others, future research should test for differences between public and private institutions by developing distinct, full structural equation model based on control status. Developing distinct models based on control status may illuminate whether or not distinct patterns in diversity enactment by institutions are different at public and private institutions and

could determine if any patterns of consistency exist or if differences are particular to an institutional type. To further interrogate patterns of difference, analyses by geographic region, institutional size, and Carnegie Classification are necessary.

Interactions with Diverse Peers and College Student Outcomes

Interactions with Diverse Others and Sense of Belonging

Chapter III extended previous research by reaffirming that predisposition towards diversity matters and has an affect on important outcomes such as college students' sense of belonging. This chapter also underscored the importance of interactions with diverse peers called for by Gurin, Dey, Hurtado and Gurin (2002), based on theories about intergroup interactions and college student experiences and development posited by Allport (1954), Feldman and Newcomb (1969), Newcomb (1943) and Piaget (1971, 1985). A key contribution of this chapter is its support for exploring linkages between students' experiences with diverse others and key college student outcomes.

Campuses with culturally themed living learning programs and student organizations focused on diversity inherently offer support for racial/ethnic diversity. Such initiatives meet Allport's (1954) condition of sanctioned support necessary to foster cross-racial interactions; such initiatives often help students establish common goals and encourage group cooperation. The study in Chapter IV also supports the importance of positive interactions with diverse others. In fact, positive interactions with others mediated the potential negative effect of higher rates of perceived racial tension on campus. The findings offer continued support for the importance of meaningful, quality interactions with diverse others. Additionally, this study illustrates the importance of creating multiple pathways for students to engage in diversity, demonstrated by the

consistent findings across models examining participation in workshops and discussions and sustained diversity engagement models.

In Chapters III and IV, the findings about the role of positive interactions with diverse others underscores the educative value of diversity. Specifically, positive interactions with diverse peers, for both Whites and students of color, result in greater participation in diversity programs for African American, Latino, and White students. In both Chapters III and IV, positive interactions with diverse peers mediated students' anxiety with diverse others. Despite the consistent findings about positive interactions with diverse others in college across the sense of belonging model in Chapter III and the two diversity-engagement models in Chapter IV, contradictions across the two student-focused studies exist. For example, the effects of predominantly White pre-college environments follow students of color and their White counterparts in to college in distinct ways. For students of color, there was a positive relationship between the number of Whites in the pre-college peer groups, neighborhoods, and high schools in both Chapters III and IV—for their White counterparts, this relationship was negative.

Chapter III revealed that students who had higher rates of perceiving of racial tension had decreased sense of belonging on their campuses but Chapter IV revealed that students who were more likely to perceive racial tension were prompted to engage in cocurricular diversity programs. Current measures of racial tension ask students to report on their campus climate. However, the lack of perspectives of faculty, staff and core leadership or objective measures such as campus hate crime data or numbers of racial incidents on a campus are make current measures of racial tension incomplete. Given the rudimentary nature of this construct and the findings across Chapters III and IV, racial

tension is a complex phenomena and a more nuanced measure of the amount of racial tension on campus is needed.

In addition to affirming the importance of positive interactions with diverse others, the results of Chapters III and IV complicate the story of diversity in the college context. The relationship of racial tension and the proportion of Whites in students' precollege environments to college student experiences are dependent on the nature of the specific outcome (e.g. sense of belonging or cocurricular diversity engagement). The number of Whites in students' precollege high schools, peer groups, and neighborhoods has distinct indirect effects on positive interactions with diverse peers for African American, Latino, and White students.

Despite confirming the importance of positive interactions with diverse others in students' sense of belonging and engagement in cocurricular diversity programs, the aforementioned complexities deserve more attention and more research is needed. For example, little has been done to assess how lower SES students interact with diverse others. In Chapter III, the variables living at home with parents and time spent socializing may be considered proxy variables for lower SES. Students who are managing financial strain as part of the their college experience are more likely to live at home and have less time to socialize due to time spent working, decreasing their chances for on-campus engagement (Cabrera, Nora, & Castaneda, 1992; St. John, 1991; St John & Noell, 1989). Continued exploration is needed on diversity and other transition outcomes such as academic self-concept, ease in managing family responsibilities, ease in making new friends, and managing financial stress. Specifically, additional hypotheses should be developed to test relationships between positive interactions and participation in other

key college programs and services such as student organizations with a racial/ethnic focus, academic support programs, and participating in faculty research to better connect sociological framework to specific student development theories (e.g. maturation, racial ethnic identity).

New inquires examining the effects of diversity on college students should focus on the differences between students of color and other groups of students and address the lack of such research on students from various SES background,. For example, whenever sample sizes allow for the disaggregation of students of color into discrete racial/ethnic groups, researchers must examine differences across these groups. Additionally, future analyses related to Chapters III and IV could include a 4-group comparison model that adds Asian Americans. Additionally, Chapter IV results suggests that an alternative model, one where the mediating measure is Participating in cocurriuclar diversity program and the dependent measure is Positive interactions with diverse others might shed light on the specific types of campus programs and initiatives that encourage students to connect with diverse others in meaningful ways.

It is important to understand how institutional actions and programming mediate the negative effects of the homogeneous pre-college environments from which many college students come, but this area is largely unexplored in Chapters III and IV. One way to begin to understand the complex set of relationships between pre-college environments, institutional programs, interactions with diverse others and broader college student outcomes is to focus separately on the relationships between pre-college environments and first year experiences. For example, the testing of SEMs in Chapters III and IV could be expanded to create and examine a set for nested models. Specifically,

future research could examine the relationships of the proportion of Whites in pre-college environment and pre-college predispositions to participate in diversity activities with positive interactions with diverse others from a broader SEM that might include outcomes at the second year of college. Other models could test the hypothesis that positive interactions reduce anxiety with diverse peers; these models could be compared with a distinct model that tests if a reduction in anxiety with diverse peers has an affect on students' perceptions of racial tension. Such models could help scholars and practitioners rethink possible relationships between the campus climate and differential academic and social outcomes for students of color. Further, traditional college student outcomes and diversity-related outcomes remain largely unlinked .Future research should examine possible relationships between transition to college outcomes and specific types of diversity engagement.

Summary

Institutional action, including creating and maintaining infrastructure that supports racial and ethnic diversity, is central to understanding campus climates for such diversity. Decisions made on campuses regarding student recruitment, faculty hiring, and the curriculum matter. Yet, connections between specific institutional actions produce specific diversity-related student outcomes have not been thoroughly explored or tested. Focusing efforts to expand explanations of differential outcomes for students beyond individual level characteristics encourages institutions to become proactive about creating college environments where equity in college outcomes is possible. Further, taking responsibility for achieving equitable outcomes across social identities, socioeconomic backgrounds, and pre-college social and academic environments may leave colleges less

vulnerable to attacks about their lack of attention to demonstrable outcomes for gradates. Finally, institutions who initiate self-assessment focused on diversity-related student outcomes for a globally interdependent twenty-first century may be strategically positioned to articulate their invaluable contribution of preparing future leaders.

Interactions with diverse others in the college context may take place in the dining halls, in study groups, or in other informal social spaces on a campus. However, students need multiple pathways to engage with their diverse peers in the college environments and institutions are responsible for creating multiple avenues and spaces for students to engagement with one another across racial and ethnic differences. These pathways should occur early and should be incorporated into many areas of the college experiences, where all campus community members are responsible for helping students develop their multicultural competencies. Institutions must also offer pathways to unique programs such as intergroup group relations programs, culturally-themed residence halls, and other structured diversity-focused programs.

Long-term effects of precollege segregation are still not well understood nor is it clear why some students are inclined to participate in diversity-related activities and other are resistant to engage in activities focused on diversity. Causality has yet to be determined in diversity related research in higher education; it is not known if these, and other related findings will remain stable if examined longitudinally. Further, more research is needed to connect institutional policies and practices that link racial and ethnic diversity directly to student outcomes. Understanding student outcomes in the context of their specific institution's climate for racial and ethnic diversity would allow scholars and practitioners alike to identify the best policies and practices to benefit

students. Given the growing racial and ethnic diversity in the U.S. and the profound expansion of global interdependence, it is imperative that colleges and universities take specific institutional actions to realize a commitment to creating and maintaining an inclusive campus climate where all students flourish, grow, and achieve academic and social success in equitable ways.

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APPENDICES

Appendix A

Institutional Survey on Civic Engagement and Diversity

Institutional Survey on Civic Engagement and Diversity
Diverse Democracy Project

The following questionnaire is designed to examine the various approaches that institutions utilize to increase student involvement in civic behaviors and awareness of diverse perspectives. This survey is one component of a larger research project, Preparing College Students for a Diverse Democracy, sponsored by the U.S. Department of Education and the Spencer Foundation. It is endorsed by the American Council on Education, the Association of American Colleges and Universities, and the American Association for Higher Education.

Important! Marking Instructions
Correct Mark ● Incorrect Marks ✓ ⊗ ◎
Use soft pencil or black ink

For Office Use Only

I. General Institutional Information

1. Is your institution (Mark one) ..... Private O Public O

2. What is your total undergraduate enrollment (Mark one)
O < 5,000 O 5,000-10,000 O 10,001-15,000 O 15,001-20,000 O >20,000

3. Do your student enrollment figures represent the demographics of the population in the local area ..... O Not representative O Somewhat representative O Very representative

4. Mark all that apply for each of the following questions: Is your institution currently a member of:	No	Yes
a. Campus Compact	O	O
b. AAC&U (Association of American Colleges and Universities)	O	O
c. AAC&U (American Commitments Project)	O	O
d. ACE (American Council on Education)	O	O
e. AAHE (American Association for Higher Education)	O	O
5. Does your institution's official mission statement address:		
a. Public Service	O	O
b. Diversity	O	O
c. Civic Engagement	O	O
6. Does your institution have programs in place to increase student, staff, and faculty involvement in civic engagement efforts and programs	O	O
7. Does your institution have an official definition of public service	O	O
8. Does your institution have formal policies that govern or guide public service activities	O	O
9. Does your institution have a centralized administrative unit or office with the primary responsibility of overseeing public service activities	O	O
10. Does your institution have any institutes or centers designed specifically to conduct applied research or to provide public service programming	O	O

II. Civic Mission

A. Institutional Priorities

Indicate the extent to which you think the following are priorities at your institution:

	Not a Priority	Moderate Priority	Strong Priority	Highest Priority
11. Maintaining a campus climate where differences of opinion can be discussed openly	O	O	O	O
12. Increasing the representation of minorities and women in the faculty and administration	O	O	O	O
13. Developing an appreciation for a multicultural society among students and faculty	O	O	O	O
14. Recruiting more underrepresented students	O	O	O	O
15. Creating a diverse multicultural learning environment on campus	O	O	O	O
16. Addressing societal problems	O	O	O	O
17. Increasing the ranking of college/university	O	O	O	O
18. Increasing or maintaining institutional prestige	O	O	O	O
19. Enhancing the institution's national image	O	O	O	O
20. Fostering greater civic engagement among students	O	O	O	O
21. Working to create and sustain long-term partnerships with communities	O	O	O	O
22. Increasing institutional and community capacities for public work	O	O	O	O
23. Allocating institutional resources (e.g., funds, time) to faculty to participate in public service activities	O	O	O	O

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B. Leadership and Commitment

Indicate the extent to which you agree with the following potential descriptions of your institution:	Strongly Disagree	Disagree	Agree	Strongly Agree
24. University leaders regularly articulate the value of diversity	O	O	O	O
25. This institution has a long-standing commitment to diversity issues	O	O	O	O
26. This institution directs resources towards civic engagement initiatives, programs, and services	O	O	O	O
27. Strategic planning documents contain goals for diversity	O	O	O	O
28. This institution has a long-standing commitment to civic engagement	O	O	O	O
29. Strategic planning documents contain goals to achieve the civic mission of the institution	O	O	O	O
30. University leaders/trustees clearly articulate the institution's public service commitment	O	O	O	O
31. There is disagreement about priorities concerning public service	O	O	O	O
32. Faculty are encouraged by our institution's academic leaders to participate in civic partnership	O	O	O	O
33. Faculty engage the campus community in public discussions about current social problems	O	O	O	O
34. Faculty lead the promotion of the civic mission of the institution	O	O	O	O
35. Faculty tenure and promotion decisions do not value public service	O	O	O	O

C. Evaluation and Rewards

Indicate your institution's level of participation in each activity:	Never	Seldom	Often	Always
36. Evaluates progress toward diversity goals for students, staff, and faculty	O	O	O	O
37. Assesses institutional efforts in civic engagement/service learning	O	O	O	O
38. Assesses the campus climate related to diversity (e.g., racism, sexism, or homophobia)	O	O	O	O
39. Recognizes students, staff, and faculty for their participation in diversity programs, initiatives, and efforts	O	O	O	O
40. Promotes research in the area of diversity	O	O	O	O
41. Publicizes the institution's accomplishments and efforts related to diversity	O	O	O	O
42. Encourages campus-wide participation in conferences and workshops related to diversity and civic engagement	O	O	O	O
43. Promotes research in the area of civic engagement	O	O	O	O

D. Campus/Community Partnerships

Indicate your institution's level of participation in each activity:	Never	Seldom	Often	Always
44. Shares important knowledge and resources with civic partners	O	O	O	O
45. Actively works to improve the social and economic conditions of surrounding communities	O	O	O	O
46. Engages other communities and stakeholders in examining how the institution can augment community development	O	O	O	O
47. Creates long-term, strong relationships with the following external constituents:				
a. Local Community-based Organizations	O	O	O	O
b. K-12 Schools	O	O	O	O
c. State and Local Government	O	O	O	O
d. Business and Industry	O	O	O	O
48. Monitors how the conditions of surrounding communities have improved	O	O	O	O

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III. Peer Comparisons

What is your institution's level of activity compared to peer institutions in the following areas:	No Activities	Fewer Activities	About the Same Activities	More Activities than Othe
49. Progress in making civic engagement a core component of the institution's general education curriculum	O	O	O	O
50. Progress on tying institutional diversity goals to resources that are allocated to various academic and administrative units on campus	O	O	O	O
51. Innovative practice and programs on issues related to social diversity	O	O	O	O
52. Innovative practice and programs on issues related to civic engagement	O	O	O	O
53. Enrollment of African American and/or Latino students	O	O	O	O
54. Campus activities that help students respect racial/ethnic, sexual orientation, and disability differences	O	O	O	O
55. Integration of social diversity issues into the general education curriculum	O	O	O	O

IV. Democracy Outcome Domains

A. Civic Behaviors

How important are the following aspects of the undergraduate experience at your institution:	Not Important	Somewhat Important	Very Important	Essential
56. Opportunities for students to interact with people across racial, ethnic, cultural, or social differences	O	O	O	O
57. Service learning opportunities within the community	O	O	O	O
58. Engagement in the political process (e.g. student, local, or national elections)	O	O	O	O
59. Student involvement in work toward social change or finding solutions to social problems	O	O	O	O
60. Programs to expose students to public service careers	O	O	O	O
61. Respect and civility towards others with different beliefs, backgrounds, and lifestyles within social contexts	O	O	O	O

B. Citizenship Skills and Dispositions

How important is it that students increase/enhance the following skills and dispositions prior to degree completion:	Not Important	Somewhat Important	Very Important	Essential
62. Tolerance of others with different beliefs	O	O	O	O
63. Sense of responsibility to a larger community	O	O	O	O
64. Willingness to take action in the face of social injustice	O	O	O	O
65. Belief in an individual's capacity to make a difference in society	O	O	O	O
66. Ability to identify common interests and values among different social groups	O	O	O	O
67. Ability to apply knowledge of democratic and social processes to solve problems	O	O	O	O
68. Ability to reason and use good judgment	O	O	O	O
69. Ability to see the world from someone else's perspective	O	O	O	O
70. Ability to work cooperatively with diverse people	O	O	O	O
71. Ability to discuss and negotiate controversial issues	O	O	O	O

Office Use ONLY

V. Campus Initiatives

A. Curricular Initiatives

Indicate the extent to which you agree with the following statements about your institution's curricular initiatives and undergraduate degree requirements:

	Strongly Disagree	Disagree	Agree	Strongly Agree
72. Living-learning communities address diversity and democracy issues	O	O	O	O
73. Courses incorporate writings and research about different ethnic groups and women	O	O	O	O
74. Requiring students to complete a community-based experience with diverse populations	O	O	O	O
75. Providing opportunities for intensive discussion between students with different backgrounds and beliefs	O	O	O	O
76. Requiring students to enroll in at least one cultural or ethnic diversity course in order to graduate	O	O	O	O
77. Giving academic credit to students for public service activities	O	O	O	O

B. Co-Curricular Initiatives

How strongly does your institution support each of the following activities for student learning about diversity and democracy:

	Does Not Support 1	2	3	4	5	6	Strongly Supports 7
78. Presentations, performances, and art exhibits on diversity	O	O	O	O	O	O	O
79. Debates and panels about diversity issues	O	O	O	O	O	O	O
80. A diversity awareness program in orientation	O	O	O	O	O	O	O
81. A multiethnic food fest for the campus community	O	O	O	O	O	O	O
82. Race awareness workshops	O	O	O	O	O	O	O
83. Volunteer opportunities for students to assist communities	O	O	O	O	O	O	O
84. Centers and institutes related to diversity and/or multiculturalism	O	O	O	O	O	O	O
85. An intergroup dialogue program	O	O	O	O	O	O	O

C. Exemplary Practices

86. Please tell us about any exemplary practices that your campus has implemented to prepare college students for a diverse democracy. Please PRINT clearly.

VI. Characteristics of Survey Respondent

87. What position do you currently hold at your institution? _____

88. How many years have you held that position? O 1 O 2 O 3 O 4 O 5 O 6 O 7 or more

89. How many years have you worked at your institution? O 1 O 2 O 3 O 4 O 5 O 6 O 7 or more

90. Are you a member of AAHE? O No O Yes

91. Please indicate what individuals (by position), offices, and resources (e.g., your institution's website) were consulted in completing this survey. Please PRINT clearly.

43070

Thank you for taking the time to complete this survey! If you have any questions about the study, you may contact Sylvia Hurtado, Project Director, Center for the Study of Higher and Postsecondary Education, 2117 SEB, Ann Arbor, MI 48109-1259.

Appendix B

Preparing College Students for a Diverse Democracy: First-Year Survey of Student Views and Experiences

Preparing College Students for a Diverse Democracy: First Year Student Views and Experiences

Dear Student: This survey is part of a national, collaborative project sponsored by the U.S. Department of Education. This campus has agreed to involve you in order to learn about students' college experiences and find ways universities might improve student preparation for living in a diverse democracy. Your participation is important to us, but it is voluntary and you do not have to answer questions that make you feel uncomfortable. Responses are strictly confidential. Identifying information will be used only for purposes of following up to find out about the quality of your experiences at this university. Thank you in advance for your assistance in this national effort.

Statement of Consent

I understand that this survey is administered by my institution in collaboration with researchers to understand students' experiences within a diverse democracy.

I hereby voluntarily give permission for my responses to be used as data in this study. I understand that all responses are completely confidential and that my name will not be associated with my responses. I understand that my name and other identifying factors will not be associated with any document produced from this research. I understand that I can express my ideas and opinions without consequence.

I may contact campus administrators or the national Project Director, Sylvia Hurtado, 2117 SEB, Ann Arbor, MI 48109-1259, any time with questions or concerns about this study.

Print your name | *Signature* | *Date*

Please indicate your answer to each question by filling in the oval representing the category which best describes your views on the issue.

Marking instructions:

Blacken in each oval completely using a number 2 pencil.
If you erase, erase completely.

INCORRECT MARKS ⊘ ⊘ ⊖ ⊖

CORRECT MARK ●

Continue on the next page ☞

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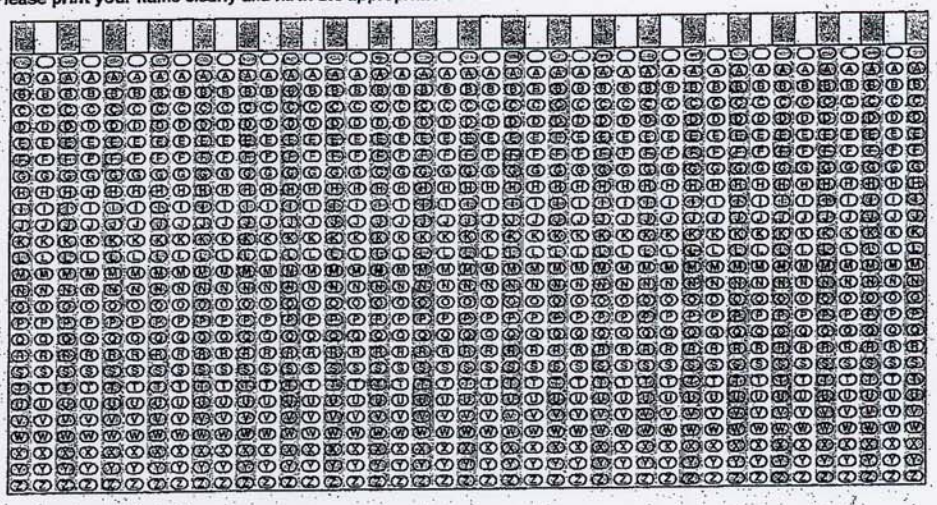
Please provide the following information so that we may locate you and send a follow-up survey about your experiences at this university.

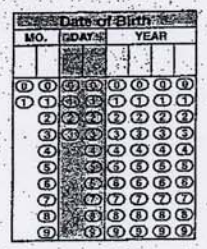
Please print your name clearly and fill in the appropriate ovals.

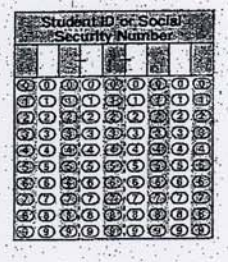


University Code: (Mark one according to instructions)

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

Please print clearly and fill in the appropriate ovals.





I. Precollegiate Experiences/Background

1. What type of high school did you graduate from? (Mark one)

- ○ Public
- ○ Religious
- ○ Private, nonreligious
- ○ GED
- ○ Home school or other

2. How would you rate yourself in the following areas? (Mark one for each item)

	A major weakness	Somewhat weak	Average	Somewhat strong	A major strength
a. Communication skills	○	○	○	○	○
b. Ability to work cooperatively with diverse people	○	○	○	○	○
c. Writing ability	○	○	○	○	○
d. Knowledge about my own culture	○	○	○	○	○
e. Math ability	○	○	○	○	○
f. Racial/cultural awareness	○	○	○	○	○
g. Ability to solve complex problems	○	○	○	○	○
h. Openness to having my views challenged	○	○	○	○	○
i. Leadership ability	○	○	○	○	○
j. Ability to see the world from someone else's perspective	○	○	○	○	○
k. Knowledge about the cultural backgrounds of others	○	○	○	○	○
l. Ability to discuss and negotiate controversial issues	○	○	○	○	○
m. Academic ability	○	○	○	○	○
n. Tolerance of others with different beliefs	○	○	○	○	○
o. Social self-confidence	○	○	○	○	○

3. How many colleges did you apply to for Fall 2000 admission (including this one)? (Mark one)

- ○ 1 college
- ○ 2 colleges
- ○ 3 colleges
- ○ 4 colleges
- ○ 5 colleges
- ○ 6 or more

4. How many acceptances did you receive? (Mark one)

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

5. Is this college your: (Mark one)

- ○ 1st choice
- ○ 2nd choice
- ○ 3rd choice
- ○ less than 3rd choice

6. Following is a list of reasons why some people select a particular college. How important was each of these reasons for your attendance at this university? (Mark one for each item)

	Not at all important	Somewhat important	Very important	Essential
a. Desire to be near or live at home	○	○	○	○
b. Good academic reputation of the university	○	○	○	○
c. Athletic program	○	○	○	○
d. Academic support programs (tutoring, writing center, etc.)	○	○	○	○
e. Social life	○	○	○	○
f. Recruitment and admissions programs made you feel welcome	○	○	○	○
g. Financial aid support	○	○	○	○
h. Racially and ethnically diverse student body	○	○	○	○
i. Alumni	○	○	○	○
j. Comfort with campus environment	○	○	○	○
k. Lower cost than other institutions	○	○	○	○
l. High school teacher or counselor	○	○	○	○
m. Parents/guardians, family members, friends	○	○	○	○

7. Where did you rank academically in your high school graduating class? (Mark one)

- ○ Top 5%
- ○ Top 10%
- ○ Top 25%
- ○ Top 50%
- ○ Top 75%
- ○ Lower 25%
- ○ Don't Know

8. Indicate how frequently you engaged in any of the following during high school: (Mark one for each item)

	Never	A few times per year	A few times per month	A few times per week	Daily
a. Used a computer to do homework	○	○	○	○	○
b. Discussed politics with students	○	○	○	○	○
c. Discussed racial/ethnic issues	○	○	○	○	○
d. Participated in student clubs	○	○	○	○	○
e. Engaged in volunteer work	○	○	○	○	○
f. Studied with someone from a different racial or ethnic group	○	○	○	○	○
g. Participated in an academic honor society	○	○	○	○	○
h. Participated in varsity sports	○	○	○	○	○
i. Participated in activities to clean up the environment	○	○	○	○	○
j. Worked on school publications	○	○	○	○	○
k. Read a newspaper	○	○	○	○	○
l. Followed the presidential election process	○	○	○	○	○
m. Participated in religious activities or spiritual ceremonies	○	○	○	○	○
n. Used the Internet or web	○	○	○	○	○

9. Which best describes where you lived most of your life before college? (Mark one)

- ○ Urban area
- ○ Suburban area
- ○ Small town
- ○ Rural area

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I. Precollegiate Experiences/Background (con't)

10. How would you describe the racial/ethnic composition of the following: (People of color includes African Americans, Hispanics, Asian Americans and American Indians) (Mark one for each item)

	All or nearly all people of color	Mostly people of color	Half white and half people of color	Mostly white	All or nearly all white
a. Neighborhood where you grew up	①	②	③	④	⑤
b. High school that you graduated from	①	②	③	④	⑤
c. Your friends in high school	①	②	③	④	⑤

11. In high school, how often did you encounter discrimination based on your: (Mark one for each item)

	Never	Occasionally	Frequently
a. Race/ethnicity	①	②	③
b. Gender	①	②	③
c. Sexual orientation	①	②	③
d. Economic background	①	②	③
e. Religious affiliation	①	②	③

II. Transition to College

12. Mark all the statements that apply to you:

- ○ a. One or both of my parents went to college here.
- ○ b. I received a scholarship to attend here.
- ○ c. I went to a two-year college before entering here.
- ○ d. I am the first in my family to go to college.
- ○ e. I received need-based financial aid.
- ○ f. I have attended a diversity awareness program.
- ○ g. I wrote a paper at least 15 pages long.
- ○ h. I spoke another language other than English at home.
- ○ i. I received merit-based financial aid.
- ○ j. I took a class on multicultural/diversity issues.
- ○ k. I applied for a loan to pay for college.

13. How difficult do you think each of the following will be during your first year at the University? (Mark one for each item)

	Very difficult	Somewhat difficult	Somewhat easy	Very easy
a. Keeping up with school work	①	②	③	④
b. Making new friends	①	②	③	④
c. Finding academic help when you need it	①	②	③	④
d. Paying for college expenses	①	②	③	④
e. Feeling comfortable in your living environment	①	②	③	④
f. Managing family responsibilities	①	②	③	④
g. Getting to know your way around	①	②	③	④

14. Which of the following best describes your living situation during your first year of college? (Mark one)

- ○ With parents or relatives
- ○ Off-campus (not with parents)
- ○ Residence hall
- ○ Other campus housing

15. How likely are you to do the following during your college career? (Mark one for each item)

	Very unlikely	Unlikely	Likely	Very likely
a. Get elected to student office.	①	②	③	④
b. Work at least part-time while in college.	①	②	③	④
c. Join a social fraternity or sorority.	①	②	③	④
d. Need extra time to complete your degree.	①	②	③	④
e. Get tutoring help in specific courses.	①	②	③	④
f. Participate in student protests.	①	②	③	④
g. Transfer to another college before graduating.	①	②	③	④
h. Drop out of college temporarily (exclude transferring).	①	②	③	④
i. Drop out permanently (exclude transferring).	①	②	③	④
j. Compete in intercollegiate athletics.	①	②	③	④
k. Participate in groups and activities reflecting your own cultural-ethnic background.	①	②	③	④
l. Take a course devoted to diversity issues in your first year of college.	①	②	③	④
m. Help members of the community get out to vote in elections.	①	②	③	④
n. Challenge others on racially/sexually derogatory comments.	①	②	③	④
o. Join an organization that promotes cultural diversity.	①	②	③	④
p. Make an effort to educate others about social issues.	①	②	③	④
q. Make efforts to get to know individuals from diverse backgrounds.	①	②	③	④

16. What is the highest academic degree that you intend to obtain? (Mark one)

- ○ None
- ○ Bachelor's Degree
- ○ Master's Degree (e.g. MS, MBA, MDiv)
- ○ Doctorate (e.g. PhD, EdD)
- ○ Professional Degree (e.g. JD, MD)
- ○ Other

III. Preferences for Thinking and Interacting

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

	Strongly disagree	Disagree somewhat	Agree somewhat	Strongly agree
a. Students who talk a lot about societal problems turn me off.	①	②	③	④
b. I try to keep up with current events.	①	②	③	④
c. Thinking about how this country will change in the future is of little interest to me.	①	②	③	④
d. I enjoy talking with other people about the reasons and possible solutions to poverty.	①	②	③	④
e. I spend little time thinking about race relations in this country.	①	②	③	④
f. I would probably find a television show on poverty in the U.S. to be interesting.	①	②	③	④
g. I want to gain a broad, intellectually exciting education.	①	②	③	④
h. I enjoy getting into discussions about political issues.	①	②	③	④
i. I often think about the amount of power people in different segments of society have.	①	②	③	④
j. When I see a homeless person, I think about how it could happen to me.	①	②	③	④
k. I learn the most about societal issues in discussions with diverse peers.	①	②	③	④

III. Preferences for Thinking and Interacting (con't)

18. We would like to know your thoughts in a variety of situations. For each item, indicate how well it describes you. (Mark one for each item)

	Not at all like me				Very much like me
a. I don't usually analyze people's behavior.	5	4	3	2	1
b. I am interested in understanding how my own thinking works when I make judgments about people.	5	4	3	2	1
c. I think very little about the different ways that people influence each other.	5	4	3	2	1
d. I really enjoy analyzing the reason or causes for people's behavior.	5	4	3	2	1
e. I think a lot about the influence that society has on other people.	5	4	3	2	1
f. I prefer simple rather than complex explanations for people's behavior.	5	4	3	2	1
g. I believe it is important to analyze and understand our own thinking processes.	5	4	3	2	1
h. I tend to take people's behavior at face value and not worry about the inner causes for their behavior.	5	4	3	2	1
i. I think a lot about the influence that society has on my behavior.	5	4	3	2	1

19. How much interaction did you have with people in each of the following groups before coming to college? (Mark one for each item)

	No interaction	Little interaction	Some regular interaction	Substantial interaction
a. African Americans/Blacks	1	2	3	4
b. Hispanics/Latinos/Chicanos	1	2	3	4
c. Asian Americans/Pacific Islanders	1	2	3	4
d. Whites/Caucasians	1	2	3	4
e. American Indians/Alaskan Natives	1	2	3	4
f. Multi-Racial/Multi-Ethnic individuals	1	2	3	4
g. Gay/Lesbian/Bisexual individuals	1	2	3	4
h. People with disabilities	1	2	3	4
i. People with different religious beliefs	1	2	3	4

20. People often have differences in perspectives. Indicate how much you agree or disagree with each statement. (Mark one for each item)

	Strongly disagree	Disagree somewhat	Agree somewhat	Strongly agree
a. There are two sides to every issue and I try to look at them both.	1	2	3	4
b. Conflicting perspectives is healthy in a democracy.	1	2	3	4
c. I try to look at everybody's side of a disagreement before I make a decision.	1	2	3	4
d. Conflict is a normal part of life.	1	2	3	4
e. I sometimes find it difficult to see the "other person's" point of view.	1	2	3	4
f. I am afraid of conflicts when discussing social issues.	1	2	3	4
g. When I'm upset at someone, I usually try to "put myself in their shoes" for a while.	1	2	3	4
h. It is best to avoid conflict with others.	1	2	3	4
i. Democracy thrives on differing views.	1	2	3	4
j. Conflict between groups can have positive consequences.	1	2	3	4
k. Building coalitions from varied interests is key to a working democracy.	1	2	3	4

21. Indicate how often you felt uncomfortable in a situation with a person or a group of people who are: (Mark one for each item)

	Never	Rarely	Sometimes	Often
a. Women	1	2	3	4
b. Hispanics/Latinos/Chicanos	1	2	3	4
c. Whites/Caucasians	1	2	3	4
d. Gays/Lesbians/Bisexuals	1	2	3	4
e. Asian Americans	1	2	3	4
f. Men	1	2	3	4
g. African Americans/Blacks	1	2	3	4
h. People with disabilities	1	2	3	4
i. American Indians/Alaskan Natives	1	2	3	4

IV. Attitudes and Beliefs

22. Please rate your level of agreement or disagreement with the following statements: (Mark one for each item)

	Strongly disagree	Disagree somewhat	Agree somewhat	Strongly agree
a. My individual rights are more important than policies for the common good.	1	2	3	4
b. Some degree of inequality is necessary in a society that wants to be the best in the world.	1	2	3	4
c. Even if I do the best I can to help others, it won't change the way society operates.	1	2	3	4
d. People in my community are counting on me to do well in college.	1	2	3	4
e. If people were treated more equally we would have fewer problems in this country.	1	2	3	4
f. I believe I can do things that can make a big difference in the lives of others.	1	2	3	4
g. My vote doesn't count much in improving the leadership or policies for this country.	1	2	3	4
h. It is not really that big a problem if some people have more of a chance in life than others.	1	2	3	4
i. Social progress should be measured by how far the least among us are able to move economically.	1	2	3	4
j. I should be able to say whatever I want rather than having to abide by rules to be civil to others.	1	2	3	4
k. I have an obligation to "give back" to the community.	1	2	3	4
l. There is little I can do to make the world a better place to live.	1	2	3	4
m. I often think about how my personal decisions affect the welfare of others.	1	2	3	4
n. Elected officials are unable to resolve their differences for the good of the people.	1	2	3	4

Continue on the next page

IV. Attitudes and Beliefs (con't)

23. In your role as a responsible citizen in this society, how important are each of the following to you? (Mark one for each item)

	Not important	Somewhat important	Very important	Essential
a. Working to end poverty.	4	3	2	1
b. Paying taxes to support public services.	4	3	2	1
c. Using career-related skills to work in low-income communities.	4	3	2	1
d. Contributing money to a political cause.	4	3	2	1
e. Supporting a strong military.	4	3	2	1
f. Promoting racial tolerance and respect.	4	3	2	1
g. Contributing money to a charitable cause.	4	3	2	1
h. Defending the right to own a gun.	4	3	2	1
i. Voting in national elections.	4	3	2	1
j. Creating awareness of how people affect the environment.	4	3	2	1
k. Working to minimize government involvement in individual affairs.	4	3	2	1
l. Making consumer decisions based on a company's ethics.	4	3	2	1
m. Speaking up against social injustice.	4	3	2	1
n. Volunteering with community groups or agencies.	4	3	2	1

24. Many colleges have programs for diversity education. Indicate whether you support or oppose each of following: (Mark one for each item)

	Strongly oppose	Oppose somewhat	Support somewhat	Strongly support
a. Incorporating writings and research about different ethnic groups and women into courses.	4	3	2	1
b. Requiring students to complete a community-based experience with diverse populations.	4	3	2	1
c. Offering courses to help students develop an appreciation for their own and other cultures.	4	3	2	1
d. Requiring students to take at least one cultural or ethnic diversity course in order to graduate.	4	3	2	1
e. Offering opportunities for intensive discussion between students with different backgrounds and beliefs.	4	3	2	1

25. Indicate the extent to which you agree or disagree with each statement. (Mark one for each item)

	Strongly disagree	Disagree somewhat	Agree somewhat	Strongly agree
a. Racial/ethnic discrimination is no longer a major problem in the U.S.	4	3	2	1
b. It's fair to give preference in college admissions to children of alumni.	4	3	2	1
c. Many Whites lack an understanding of the problems that people from different racial/ethnic groups face.	4	3	2	1
d. Colleges should support women's athletics as much as they support men's athletics.	4	3	2	1
e. Our society has done enough to promote the welfare of different racial/ethnic groups.	4	3	2	1
f. A high priority should be given to see that students of color receive financial aid for college.	4	3	2	1
g. Hiring more faculty of color should be a top priority of this University.	4	3	2	1
h. The system prevents people of color from getting their fair share of good jobs and better pay.	4	3	2	1
i. State hate crimes laws are needed to protect people from harassment based on race, gender or sexual orientation.	4	3	2	1
j. A person's racial background in this society does not interfere with achieving everything he or she wants to achieve.	4	3	2	1
k. Colleges should aggressively recruit more students of color.	4	3	2	1
l. Enhancing a student's ability to live in a multicultural society is part of a university's mission.	4	3	2	1
m. Colleges do not have a responsibility to correct racial/ethnic injustice.	4	3	2	1
n. Emphasizing diversity contributes to disunity on campus.	4	3	2	1

26. We are all members of different social identity groups (e.g., gender, race, ethnicity, sexual orientation, socio-economic class, etc.). How often do you think about your: (Mark one for each item)

	Never	Rarely	Sometimes	Often
a. Gender	4	3	2	1
b. Race	4	3	2	1
c. Ethnicity	4	3	2	1
d. Sexual orientation	4	3	2	1
e. Physical or learning disability	4	3	2	1
f. Socio-economic class	4	3	2	1

IV. Attitudes and Beliefs (con't)

27. Indicate the extent to which you agree or disagree with each statement. (Mark one for each item)

	Strongly disagree	Disagree somewhat	Agree somewhat	Strongly agree
a. It is important for me to educate others about the social identity groups to which I belong.	1	2	3	4
b. I often think about what I have in common with others in my racial/ethnic group.	1	2	3	4
c. I like to learn about social identity groups different from my own.	1	2	3	4
d. I would probably not be able to continue my friendship with a friend who I discovered was homosexual.	1	2	3	4
e. I think that what generally happens to people in my racial/ethnic group will affect what happens in my life.	1	2	3	4
f. I want to bridge differences between social identity groups.	1	2	3	4
g. I am physically attracted to women.	1	2	3	4
h. I feel proud when a member of my racial/ethnic group accomplishes something outstanding.	1	2	3	4
i. Women should be taken as seriously as men in the classroom.	1	2	3	4
j. If I found out someone I knew was gay, lesbian, or bisexual, I'd be accepting and supportive.	1	2	3	4
k. Students with disabilities should not be given extra time to take tests.	1	2	3	4
l. Immigrants should receive the same public services as U.S. citizens.	1	2	3	4
m. I am physically attracted to men.	1	2	3	4
n. To treat everyone fairly, we need to ignore the color of people's skin.	1	2	3	4
o. Romantic relationships between people of the same gender are as acceptable as they are for heterosexual couples.	1	2	3	4
p. I would vote in a presidential election for a qualified woman whose views are similar to mine.	1	2	3	4
q. I am not likely to date or marry someone from a race/ethnicity different than my own.	1	2	3	4

28. Indicate whether you think each of the following racial/ethnic groups have similar or different values and beliefs from your own. (Mark one for each item)

	Very similar	Somewhat similar	Somewhat different	Very different
a. African Americans/Blacks	1	2	3	4
b. Hispanics/Latinos/Chicanos	1	2	3	4
c. Asian Americans/Pacific Islanders	1	2	3	4
d. Whites/Caucasians	1	2	3	4
e. Native American/American Indians/Alaskan Natives	1	2	3	4

V. Demographic Information

29. What is your gender? (Mark one)

○ Male ○ Female

30. What is your current marital status? (Mark one)

○ Single, never married ○ Separated
○ Married ○ Divorced
○ Living with someone in a marriage-like relationship ○ Widowed

31. Do you have a disability? (Mark all that apply)

○ a. None
○ b. Learning disability
○ c. Physical/health related disability
○ d. Other disability

32. How do you identify yourself racially/ethnically? (Mark all that apply)

○ a. African American/Black
○ b. Asian American/Pacific Islander (includes the Indian subcontinent)
○ c. Native American/American Indian/Alaskan Native
○ d. Hispanic/Latino/Chicano
○ e. White/Caucasian (not of Hispanic origin; persons having origins in Europe, North Africa, or the Middle East)

33. What is the highest level of education completed by each of your parents/guardians? (Mark one in each column)

Level of education completed	Mother	Father
Don't Know	○	○
Some high school	○	○
High school graduate	○	○
Some college	○	○
Bachelor's degree	○	○
Master's degree	○	○
Doctorate or professional degree (e.g. JD, MD, PhD)	○	○

34. What is your best estimate of your total family income last year? Consider income from all sources before taxes: (Mark one)

○ Less than $10,000 ○ $40,000-59,999
○ $10,000-19,999 ○ $60,000-99,999
○ $20,000-29,999 ○ $100,000-149,999
○ $30,000-39,999 ○ $150,000 or more

35. Which of the following most accurately describes your generation and citizenship status? (Mark one)

○ At least one of my grandparents, my parents and I are U.S. born.
○ At least one of my parents and I are U.S. born.
○ I am U.S. born, my parents are not .
○ Foreign born – naturalized citizen.
○ Foreign born – resident alien or permanent resident.
○ Student visa.

Continue on the next page

PREPARING COLLEGE STUDENTS FOR A DIVERSE DEMOCRACY

Brief Description of the Project

Higher education plays a central role in ensuring that all graduates are prepared to live and work in a society where one out of three Americans will be a member of a racial/ethnic minority and most of the growth in new jobs will require a college degree. In order to prepare students to participate in a diverse democracy and increase student engagement with diverse perspectives, colleges have developed a wide range of initiatives that include such practices as community service learning programs, facilitated intergroup dialogues, and a variety of curricular initiatives. However, we have yet to understand how students develop cognitive, social, and democratic skills through campus initiatives and informal interactions with diverse peers during college. One of the primary objectives of this project is to understand the link between diversity and learning on college campuses and to extend the development of promising practices among participating institutions. We aim to explore:

- How colleges are creating diverse learning environments and actively preparing students to live and work in an increasingly complex and diverse democracy;
- The role of the diverse peer group in the acquisition of important cognitive, social, and democratic outcomes both inside and outside of classroom environments;
- Student outcomes that can be best achieved through specific kinds of initiatives designed to increase student engagement with diverse perspectives.

Collaborative research and programmatic activities will take place on ten large, public institutions with variation in their educational practices and diversity of the student body. Several methods will be used to collect information on cognitive, social cognitive and democracy outcomes, including a longitudinal survey of students, several focused classroom-based studies, institutional records, and student focus groups. Each campus will have a campus liaison who will work with researchers at the University of Michigan and will establish a campus team to ensure the success of the project. It is expected that each campus will be able to utilize student data in future planning activities and share promising practices that may serve as a model for other institutions across the country.

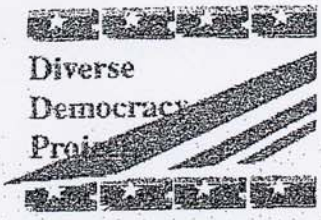
The project is a significant attempt to bring empirical evidence to inform the practice of educating a diverse student body. It intends to move beyond the current affirmative action controversy to provide action and discussion about the types of education that will be necessary for citizenship in a diverse society with a common destiny. Timed to coincide with the national elections, we have a unique opportunity to learn about student orientations regarding self-interest or public interest, their conceptions of democracy, and engagement in formal democratic processes. Institutions are searching for a new vision and are eager to acquire research and theory that can guide practice. Therefore, this project is important in revitalizing higher education's mission to prepare a diverse student body for future democratic citizenship and has the endorsement of the American Association for Higher Education, the Association of American Colleges and Universities, and the American Council on Education. It is funded by the U.S. Department of Education, Office of Educational Research and Improvement.

Contact the *Diverse Democracy Project* (divdemo@umich.edu), Sylvia Hurtado, Principal Investigator: 610 East University Ave., 2022M School of Education, University of Michigan, Ann Arbor, MI 48109-1259. Phone: 734-647-7439.

APPENDIX C

Preparing College Students for a Diverse Democracy: Second-Year Survey of Student Views and Experiences

Preparing College Students for a Diverse Democracy: Second-Year Survey of Student Views and Experiences



Dear Student: This survey is part of a national, collaborative project sponsored by the U.S. Department of Education. This campus has agreed to involve you in order to learn about students' college experiences and find ways universities might improve student preparation for living in a diverse democracy. Your participation is important to us; but it is voluntary and you do not have to answer questions that make you feel uncomfortable, and you can withdraw at anytime. Responses are strictly confidential. Identifying information will be used only for purposes of following up to find out about the quality of your experiences at this university. Thank you in advance for your assistance in this national effort.

Statement of Consent

I am over 17 years of age, in good physical health, and understand that this survey is administered by my institution in collaboration with researchers to understand students' experiences within a diverse democracy.

I hereby voluntarily give permission for my responses to be used as data in this study. I understand that all responses are completely confidential and that my name will not be associated with my responses. I understand that my name and other identifying factors will not be associated with any document produced from this research. I understand that my name and ID number will be used to merge responses from this survey and the first-year survey and that after all data have been merged, my name and ID number will be removed from the data set. I understand that I can express my ideas and opinions without consequence and that there are no known risks to participating in this project.

I may contact campus administrators or the national Project Director, Sylvia Hurtado, 2117 SEB, Ann Arbor MI 48109-1259 any time with questions or concerns about this study. Additionally, I may contact the Chairperson of my campus IRB Office with any questions regarding my participation in this study.

Print your name _____ *Signature* _____ *Date* _____

Please indicate your answer to each question by filling in the oval representing the category which best describes your views on the issue.

Marking instructions:

Blacken in each oval completely using a number 2 pencil
If you erase, erase completely.

INCORRECT MARKS ⊘ ⊗ ⊖ ⊙

CORRECT MARK ●

Continue on the next page

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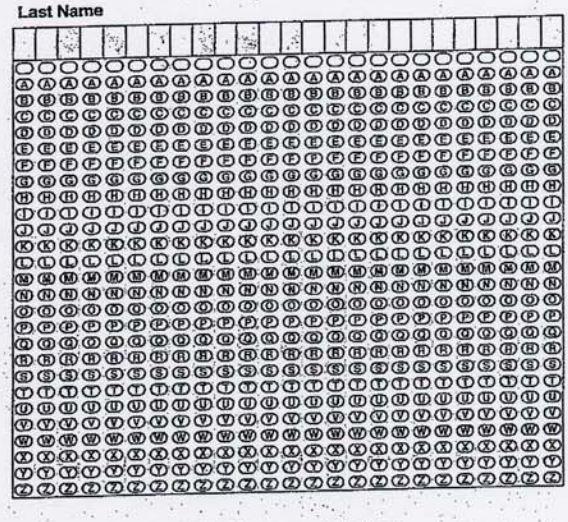
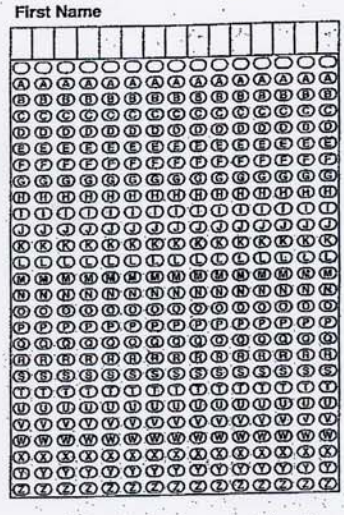
Please provide the following information so that we may locate you and send a follow-up survey about your experiences at this university.

Please print your name clearly and fill in the appropriate ovals.

Last Name



First Name



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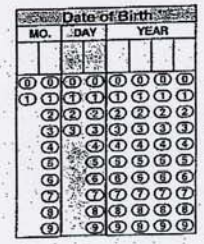

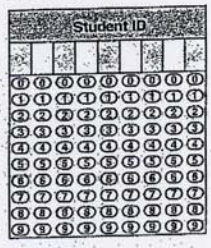

I. Experiences/Background

1. Which University did you enter in Fall 2000? (Mark one only)

- ○ Arizona State Univ.
- ○ Norfolk State Univ.
- ○ UCLA
- ○ Univ. of Maryland
- ○ Univ. of Massachusetts
- ○ Univ. of Michigan
- ○ Univ. of Minnesota
- ○ Univ. of New Mexico
- ○ Univ. of Vermont
- ○ Univ. of Washington

2. Which of the following describes your current enrollment status? (Mark one only)

- ○ Enrolled at the same university I entered in Fall 2000
- ○ Enrolled at a different college/university
- ○ Not enrolled at any college/university

3. Will you enroll at this university in Fall 2002?

- ○ No
- ○ Yes

★★★★★★★★★★★★★★★★★★★★★★★★★

Please complete the survey even if you are no longer enrolled at the university marked in question 1.

★★★★★★★★★★★★★★★★★★★★★★★★★

4. How difficult was each of the following during your first year at the University? (Mark one for each item)

	Very easy	Somewhat easy	Somewhat difficult	Very difficult
a. Keeping up with school work	①	②	③	④
b. Making new friends	①	②	③	④
c. Finding academic help when you needed it	①	②	③	④
d. Paying for college expenses	①	②	③	④
e. Feeling comfortable in your living environment	①	②	③	④
f. Managing family responsibilities	①	②	③	④
g. Getting to know your way around	①	②	③	④

5. How would you currently rate yourself in the following areas? (Mark one for each item)

	A major strength	Somewhat strong	Average	Somewhat weak	A major weakness
a. Communication skills	①	②	③	④	⑤
b. Ability to work cooperatively with diverse people	①	②	③	④	⑤
c. Writing ability	①	②	③	④	⑤
d. Knowledge about my own culture	①	②	③	④	⑤
e. Math ability	①	②	③	④	⑤
f. Racial/cultural awareness	①	②	③	④	⑤
g. Ability to solve complex problems	①	②	③	④	⑤
h. Openness to having my views challenged	①	②	③	④	⑤
i. Leadership ability	①	②	③	④	⑤
j. Ability to see the world from someone else's perspective	①	②	③	④	⑤
k. Knowledge about the cultural backgrounds of others	①	②	③	④	⑤
l. Ability to discuss and negotiate controversial issues	①	②	③	④	⑤
m. Academic ability	①	②	③	④	⑤
n. Tolerance of others with different beliefs	①	②	③	④	⑤
o. Social self-confidence	①	②	③	④	⑤

6. Mark all of the activities that apply to you since you entered college:

- ○ a. Participated in intercollegiate athletics
- ○ b. Helped members in the community to get out and vote
- ○ c. Lived in a culturally-themed residence hall/floor/house
- ○ d. Assisted on faculty research projects
- ○ e. Studied abroad (outside of U.S.)
- ○ f. Voted in federal/state elections
- ○ g. Joined a sorority or fraternity
- ○ h. Joined an organization reflecting my own cultural heritage
- ○ i. Held a campus leadership position (e.g. student government, Resident Advisor, club officer, etc.)
- ○ j. Transferred from another college
- ○ k. Joined an organization that promotes cultural diversity
- ○ l. Joined an Asian, Black or Latino sorority or fraternity
- ○ m. Dropped out of college temporarily
- ○ n. Lived with people from cultural backgrounds different than my own
- ○ o. Voted in student government elections

7. Since coming to the University, how often have you done the following? (Mark one for each item)

	Very often	Often	Sometimes	Seldom	Never
a. Participated in class discussion	①	②	③	④	⑤
b. Made an effort to educate others about social issues	①	②	③	④	⑤
c. Felt challenged to think more broadly about an issue	①	②	③	④	⑤
d. Heard students express stereotypes about racial/ethnic groups	①	②	③	④	⑤
e. Participated in student protests	①	②	③	④	⑤
f. Fell asleep in class	①	②	③	④	⑤
g. Felt insulted or threatened based on my sexual orientation	①	②	③	④	⑤
h. Made efforts to get to know individuals from diverse backgrounds	①	②	③	④	⑤
i. Felt overwhelmed by all I had to do	①	②	③	④	⑤
j. Challenged others on racially/sexually derogatory comment	①	②	③	④	⑤
k. Talked to high school students about college	①	②	③	④	⑤
l. Engaged in discussions about racial/ethnic issues in class	①	②	③	④	⑤
m. Felt pressure from members of my own racial/ethnic group not to socialize with other racial/ethnic groups	①	②	③	④	⑤

8. What is the highest academic degree that you intend to obtain? (Mark one)

- ○ None
- ○ Bachelor's Degree
- ○ Master's Degree (e.g. MS, MBA, MDiv)
- ○ Doctorate (e.g. PhD, EdD)
- ○ Professional Degree (e.g. JD, MD)
- ○ Other

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I. Experiences/Background (con't)

9. Approximately how many hours per week do you typically spend doing the following? (Mark one for each item)

	Over 20 hours	16-20 hours	11-15 hours	6-10 hours	1-5 hours	0 hours
a. Working for pay	①	②	③	④	⑤	⑥
b. Socializing with other students	①	②	③	④	⑤	⑥
c. Studying	①	②	③	④	⑤	⑥
d. Attending to home responsibilities	①	②	③	④	⑤	⑥

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

	Very often	Often	Sometimes	Seldom	Never
a. Dined or shared a meal	①	②	③	④	⑤
b. Had meaningful and honest discussions about race/ethnic relations outside of class	①	②	③	④	⑤
c. Had guarded, cautious interactions	①	②	③	④	⑤
d. Shared personal feelings and problems	①	②	③	④	⑤
e. Had tense, somewhat hostile interactions	①	②	③	④	⑤
f. Felt insulted or threatened based on my race or ethnicity	①	②	③	④	⑤
g. Studied or prepared for class	①	②	③	④	⑤
h. Socialized or partied	①	②	③	④	⑤
i. Had intellectual discussions outside of class	①	②	③	④	⑤
j. Attended events sponsored by other racial/ethnic groups	①	②	③	④	⑤

11. Since coming to the University, how often have you participated in the following? (Mark one for each item)

	Very often	Often	Sometimes	Seldom	Never
a. Events sponsored by a fraternity or sorority	①	②	③	④	⑤
b. Residence hall activities (e.g. hall council, social activities, etc.)	①	②	③	④	⑤
c. Events or activities sponsored by groups reflecting your own cultural heritage	①	②	③	④	⑤
d. Tutoring sessions where you received help for specific courses	①	②	③	④	⑤
e. Community service activities	①	②	③	④	⑤
f. Academic support programs	①	②	③	④	⑤
g. Campus organized discussions on racial/ethnic issues	①	②	③	④	⑤
h. Diversity awareness workshops	①	②	③	④	⑤
i. Religious or spiritual activities	①	②	③	④	⑤
j. Activities to clean up the environment	①	②	③	④	⑤

12. Which of the following describe your response to the terrorist attacks on the World Trade Center and Pentagon? (Mark all that apply)

- ○ a. Attended a class, seminar, campus panel, workshop, or information session related to September 11
- ○ b. Felt more aware of my own ethnic minority status or Middle Eastern ethnicity
- ○ c. Attended a campus vigil
- ○ d. Became more aware of being an American
- ○ e. Donated blood
- ○ f. Felt wary of people who appear to be of Middle Eastern descent
- ○ g. Participated in activities to help others
- ○ h. Displayed an American flag
- ○ i. Felt more aware of my status as an international student
- ○ j. Did not participate in any activities related to September 11

II. Classroom Experiences

13. Which best describes the field of your intended major? (Mark only one answer)

- ○ Agricultural Sciences
- ○ Arts (including performing arts, architecture and fine arts)
- ○ Biological Sciences
- ○ Business/Management
- ○ Communications
- ○ Computer Science
- ○ Cultural Studies/Ethnic Studies
- ○ Education
- ○ Engineering
- ○ Health Professions
- ○ Humanities
- ○ Math/Physical Sciences
- ○ Social Sciences
- ○ Social Work
- ○ Undecided

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

	Strongly agree	Agree somewhat	Disagree somewhat	Strongly disagree
a. There are few students of color in my classes	①	②	③	④
b. I am enthusiastic about this university	①	②	③	④
c. This university offers ample opportunity for students to learn about different racial/ethnic groups in a non-threatening way	①	②	③	④
d. I have been singled out in class because of my race/ethnicity, gender or sexual orientation	①	②	③	④
e. I see myself as a part of the university community	①	②	③	④
f. There is a lot of racial tension on the University campus	①	②	③	④
g. At least one faculty member has taken an interest in my development	①	②	③	④
h. I feel a sense of belonging to this university	①	②	③	④
i. I have heard faculty express stereotypes about racial/ethnic groups in class	①	②	③	④
j. I feel that I am a member of the University community	①	②	③	④
k. Faculty who are racially/ethnically similar to me address issues of greater relevance to me	①	②	③	④
l. If asked, I would recommend this university to others	①	②	③	④

30811 PLEASE DO NOT MARK IN THIS AREA

II. Classroom Experiences (con't)

15. How many courses have you enrolled in that included the following?: (Mark one for each item)

	Three or more	Two	One	None
a. Material/readings on gender issues	①	②	③	④
b. Faculty who created opportunities for class discussions/interactions with other students	①	②	③	④
c. Material/readings on issues of oppression	①	②	③	④
d. An experience serving communities in need (e.g. service learning)	①	②	③	④
e. Material/readings on race and ethnicity issues	①	②	③	④
f. Opportunities for intensive dialogue between students with different backgrounds and beliefs	①	②	③	④

III. Thinking and Interacting

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

	Strongly agree	Agree somewhat	Disagree somewhat	Strongly disagree
a. Students who talk a lot about societal problems turn me off	①	②	③	④
b. I try to keep up with current events	①	②	③	④
c. Thinking about how this country will change in the future is of little interest to me	①	②	③	④
d. I enjoy talking with other people about the reasons and possible solutions to poverty	①	②	③	④
e. I spend little time thinking about race relations in this country	①	②	③	④
f. I would probably find a television show on poverty in the U.S. to be interesting	①	②	③	④
g. I want to gain a broad, intellectually exciting education	①	②	③	④
h. I enjoy getting into discussions about political issues	①	②	③	④
i. I often think about the amount of power people in different segments of society have	①	②	③	④
j. When I see a homeless person, I think about how it could happen to me	①	②	③	④
k. I learn the most about societal issues in discussions with diverse peers	①	②	③	④

17. We would like to know your thoughts in a variety of situations. For each item, indicate how well it describes you. (Mark one for each item)

	Very much like me	Like me	Somewhat like me	Not like me	Not at all like me
a. I am interested in understanding how my own thinking works when I make judgments about people	①	②	③	④	⑤
b. I really enjoy analyzing the reason or causes for people's behavior	①	②	③	④	⑤
c. I think a lot about the influence that society has on other people	①	②	③	④	⑤
d. I realize that getting along with individuals from different racial groups is more difficult than I originally thought	①	②	③	④	⑤
e. I prefer simple rather than complex explanations for people's behavior	①	②	③	④	⑤
f. I believe it is important to analyze and understand our own thinking processes	①	②	③	④	⑤
g. I think a lot about the influence that society has on my behavior	①	②	③	④	⑤

18. How much interaction have you had with people in each of the following groups in college? (Mark one for each item)

	Substantial interaction	Some regular interaction	Little interaction	No interaction
a. African Americans/Blacks	①	②	③	④
b. Hispanics/Latinos/Chicanos	①	②	③	④
c. Asian Americans/Pacific Islanders	①	②	③	④
d. Whites/Caucasians	①	②	③	④
e. American Indians/Alaskan Natives	①	②	③	④
f. Gay/Lesbian/Bisexual individuals	①	②	③	④
g. People with disabilities	①	②	③	④
h. People with different religious beliefs	①	②	③	④

19. Think of your 5 closest friends at this university; how many of them are of a different race/ethnicity from yourself? (Mark one)

- ○ None
- ○ One
- ○ Two
- ○ Three
- ○ Four or more

Continue on the next page

III. Thinking and Interacting (con't)

20. People often have differences in perspectives. Indicate how much you agree or disagree with each statement. (Mark one for each item)

	1 Strongly agree	2 Agree somewhat	3 Disagree somewhat	4 Strongly disagree
a. There are two sides to every issue and I try to look at them both	①	②	③	④
b. Conflicting perspectives is healthy in a democracy	①	②	③	④
c. I try to look at everybody's side of a disagreement before I make a decision	①	②	③	④
d. Conflict is a normal part of life	①	②	③	④
e. I sometimes find it difficult to see the "other person's" point of view	①	②	③	④
f. I am afraid of conflicts when discussing social issues	①	②	③	④
g. When I'm upset at someone, I usually try to "put myself in their shoes" for a while	①	②	③	④
h. It is best to avoid conflict with others	①	②	③	④
i. Democracy thrives on differing views	①	②	③	④
j. Conflict between groups can have positive consequences	①	②	③	④
k. Building coalitions from varied interests is key to a working democracy	①	②	③	④

21. Indicate how often you felt uncomfortable in a situation with a person or a group of people who are: (Mark one for each item)

	1 Never	2 Rarely	3 Sometimes	4 Often
a. Hispanics/Latinos/Chicanos	①	②	③	④
b. Whites/Caucasians	①	②	③	④
c. Gays/Lesbians/Bisexuals	①	②	③	④
d. Asian Americans/Pacific Islanders	①	②	③	④
e. African Americans/Blacks	①	②	③	④
f. American Indians/Alaskan Natives	①	②	③	④

IV. Attitudes and Beliefs

22. In your role as a responsible citizen in this society, how important is each of the following to you? (Mark one for each item)

	1 Essential	2 Very important	3 Somewhat important	4 Not important
a. Working to end poverty	①	②	③	④
b. Paying taxes to support public services	①	②	③	④
c. Using career-related skills to work in low-income communities	①	②	③	④
d. Contributing money to a political cause	①	②	③	④
e. Supporting a strong military	①	②	③	④
f. Promoting racial tolerance and respect	①	②	③	④
g. Contributing money to a charitable cause	①	②	③	④
h. Defending the right to own a gun	①	②	③	④
i. Voting in national elections	①	②	③	④
j. Creating awareness of how people affect the environment	①	②	③	④
k. Working to minimize government involvement in individual affairs	①	②	③	④
l. Making consumer decisions based on a company's ethics	①	②	③	④
m. Speaking up against social injustice	①	②	③	④
n. Volunteering with community groups or agencies	①	②	③	④

23. Indicate whether you think each of the following racial/ethnic groups have similar or different values and beliefs from your own. (Mark one for each item)

	1 Very similar	2 Somewhat similar	3 Somewhat different	4 Very different
a. African Americans/Blacks	①	②	③	④
b. Hispanics/Latinos/Chicanos	①	②	③	④
c. Asian Americans/Pacific Islanders	①	②	③	④
d. Whites/Caucasians	①	②	③	④
e. American Indians/Alaskan Natives	①	②	③	④

24. Please rate your level of agreement or disagreement with the following statements: (Mark one for each item)

	1 Strongly agree	2 Agree somewhat	3 Disagree somewhat	4 Strongly disagree
a. My individual rights are more important than policies for the common good	①	②	③	④
b. Some degree of inequality is necessary in a society that wants to be the best in the world	①	②	③	④
c. Even if I do the best I can to help others, it won't change the way society operates	①	②	③	④
d. People in my community are counting on me to do well in college	①	②	③	④
e. If people were treated more equally we would have fewer problems in this country	①	②	③	④
f. I believe I can do things that can make a big difference in the lives of others	①	②	③	④
g. My vote doesn't count much in improving the leadership or policies for this country	①	②	③	④
h. It is not really that big a problem if some people have more of a chance in life than others	①	②	③	④
i. Social progress should be measured by how far the least among us are able to move economically	①	②	③	④
j. I should be able to say whatever I want rather than having to abide by rules to be civil to others	①	②	③	④
k. I have an obligation to "give back" to the community	①	②	③	④
l. There is little I can do to make the world a better place to live	①	②	③	④
m. I often think about how my personal decisions affect the welfare of others	①	②	③	④
n. Elected officials are unable to resolve their differences for the good of the people	①	②	③	④

IV. Attitudes and Beliefs (con't)

25. Indicate the extent to which you agree or disagree with each statement. (Mark one for each item)

	Strongly agree	Agree somewhat	Disagree somewhat	Strongly disagree
a. Racial/ethnic discrimination is no longer a major problem in the U.S.	1	2	3	4
b. It's fair to give preference in college admissions to children of alumni	1	2	3	4
c. Colleges should support women's athletics as much as they support men's athletics	1	2	3	4
d. Our society has done enough to promote the welfare of different racial/ethnic groups	1	2	3	4
e. Hiring more faculty of color should be a top priority of this university	1	2	3	4
f. Colleges do not have a responsibility to correct racial/ethnic injustice	1	2	3	4
g. The system prevents people of color from getting their fair share of good jobs and better pay	1	2	3	4
h. Emphasizing diversity contributes to disunity on campus	1	2	3	4
i. State hate crime laws are needed to protect people from harassment based on race, gender or sexual orientation	1	2	3	4
j. Colleges should aggressively recruit more students of color	1	2	3	4
k. A person's racial background in this society does not interfere with achieving everything he or she wants to achieve	1	2	3	4
l. Enhancing a student's ability to live in a multicultural society is part of a university's mission	1	2	3	4
m. We need to stop emphasizing race and treat everybody the same	1	2	3	4
n. A high priority should be given to see that students of color receive financial aid for college	1	2	3	4

26. We are all members of different social identity groups (e.g., gender, race, ethnicity, sexual orientation, socio-economic class, etc.). How often do you think about your: (Mark one for each item)

	Often	Sometimes	Rarely	Never
a. Gender	1	2	3	4
b. Race	1	2	3	4
c. Ethnicity	1	2	3	4
d. Sexual orientation	1	2	3	4
e. Socio-economic class	1	2	3	4

27. Indicate the extent to which you agree or disagree with each statement. (Mark one for each item)

	Strongly agree	Agree somewhat	Disagree somewhat	Strongly disagree
a. It is important for me to educate others about the social identity groups to which I belong	1	2	3	4
b. I often think about what I have in common with others in my racial/ethnic group	1	2	3	4
c. I like to learn about social identity groups different from my own	1	2	3	4
d. I would probably not be able to continue my friendship with a friend who I discovered was homosexual	1	2	3	4
e. I think that what generally happens to people in my racial/ethnic group will affect what happens in my life	1	2	3	4
f. I want to bridge differences between social identity groups	1	2	3	4
g. I am physically attracted to women	1	2	3	4
h. I feel proud when a member of my racial/ethnic group accomplishes something outstanding	1	2	3	4
i. If I found out someone I knew was gay, lesbian, or bisexual, I'd be accepting and supportive	1	2	3	4
j. Students with disabilities should not be given extra time to take tests	1	2	3	4
k. Immigrants should receive the same public services as U.S. citizens	1	2	3	4
l. I am physically attracted to men	1	2	3	4
m. Romantic relationships between people of the same gender are as acceptable as they are for heterosexual couples	1	2	3	4

V. Demographic Information

28. What is your gender? (Mark one)

○ Male ○ Female

29. Which best describes your current living situation this academic year? (Mark one)

- ○ With parents or relatives
- ○ Off-campus (not with family)
- ○ Residence hall
- ○ Fraternity or sorority
- ○ Other campus housing

30. What is your current marital status? (Mark one)

- ○ Single, never married
- ○ Married
- ○ Living with someone in a marriage-like relationship
- ○ Separated
- ○ Divorced
- ○ Widowed

31. How do you identify yourself racially/ethnically? (Mark all that apply)

- ○ a. African American/Black
- ○ b. Asian American/Pacific Islander (includes the Indian subcontinent)
- ○ c. American Indian/Alaskan Native
- ○ d. Hispanic/Latino/Chicano
- ○ e. White/Caucasian (not of Hispanic origin; persons having origins in Europe, North Africa, or the Middle East)

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