ABSTRACT

Title of Document: INTERACTIONAL DIVERSITY AND THE
ROLE OF A SUPPORTIVE RACIAL CLIMATE

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This study examines student's perception of the campus racial climate and interactional

diversity at selective undergraduate liberal arts institutions through an examination of

data collected in the 2005 National Survey of Student Engagement (NSSE). Student

responses are selected from institutions identified as members of a specified group of

Virginia peers and institutions identified as members of COPLAC. The primary

variables used to assess climate and diversity include: class standing, race, gender,

institution type, enrollment, location and compositional diversity (i.e., racial

composition). Findings indicate that perceptions of the campus racial climate are

primarily related to class standing. In addition, it was determined that a significant

predictor of interactional diversity is student's perception of a supportive racial campus

climate. Finally, findings lend initial credibility to the claim that seniors and females

perceive a less supportive campus climate at some institutions.

INTERACTIONAL DIVERSITY AND THE ROLE OF A SUPPORTIVE RACIAL
CLIMATE

by

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CHAPTER I - INTRODUCTION

Current research in higher education continues to address the benefits of diversity related experiences for students, institutions and eventually the global society. For many years the argument for diversity was based on social justice (Banks, 1991; Bliming, 2001; Solorzano, Ceja, & Yosso, 2000). To reduce the social injustices of many racial and ethnic minorities, colleges and universities needed to take affirmative steps in providing equal access to higher education (Gurin, 1999). These benefits were extensively debated in the court system. In the Regents of University of California v. Bakke [438 U.S. 265, (1978)] the court acknowledged that a racially diverse student body expanded and encouraged a range of viewpoints that would contribute to a robust educational environment. However, the courts later ruled in Gratz v. Bollinger [539 U.S. 244 (2003)] and Grutter v. Bollinger [539 U.S. 306 (2003)], that race can be one of many factors considered when determining the benefits that are gained by a diverse student body. Later the argument for diversity among the student body was based on projected workforce demographics and an increasingly connected and global economy (Chang, 2000; Smith, et al., 1997; Tierney, 1993). Since it was estimated that the workforce in the United States was changing and that ethnic and racial minorities would make up over one third of the population (The Chronicle Higher Education, 2001), the justification became one of economic prudence. The competitiveness of the nation depended on an educated workforce and new demographics called for a change in social, political and educational practices. Access to education and degree completion became front-burner issues for college personnel administration, as well as for those who were seeking to earn a degree. Further, if individuals were to survive in a rapidly changing workforce, they would need

to learn to work and interact in a very diverse and global community. Unsurprisingly, higher education has emerged as a primary training ground for such a workforce. These issues remain so today, and continue to evolve with changes in the nations diverse institutions.

Meanwhile, the argument for continuing and further increasing racial diversity efforts on college campuses is anchored in the claim that such efforts have substantial academic benefits for all students. Scholars working in the area of diversity have been studying the influence of racial diversity on campuses across the country for over 25 years (Chang, 2000; Gurin, 1999; Hurtado, Milem, Clayton, Pedersen, and Allen, 1999; Kuh & Umbach, 2005; Sedlacek, 1987; Umbach & Kuh, 2006). Cumulatively, their efforts suggest that a racially diverse population of students, faculty and staff is positively related to greater openness toward and understanding of diverse people (Astin, 1993; Chang, 2002; Gurin, 1999; Pascarella & Terenzini, 2005; Pike, 2002; Whitt, Edison, Pascarella, Terenzini, & Nora, 2001). Additionally, a racially diverse campus environment is believed to be linked to enhanced intellectual development and greater gains in critical thinking (Antonio, 2001; Hu & Kuh, 2003; Pascarella & Terenzini, 2001; Umbach & Kuh, 2006). In addition, this unique learning environment offers enhanced personal and social development leading to positive perceptions of the campus environment (Chang, 1999; Gurin, 1999; Umbach & Kuh, 2006). Equally important is the type of institution that students will attend: public vs. private, Historically Black College/University vs. a Predominantly White Institution (Kuh & Umbach, 2005). Despite the fact that research on this subject has been conducted for the past 25 years, researchers still struggle with the relationship between racial and/or ethnic diversity and

the student experience. Although researchers are cautious in their conclusions as to whether diverse college environments generate sustainable positive outcomes; most suggest that there are statistical gains (Chang, Astin & Kim, 2004; Cole & Jackson, 2005; Hu & Kuh, 2003; Hurtado, et al., 1999; Nora, 2002; Orfield & Kurlaender, 2001).

Diversity and the Liberal Arts Education

Although compelling debates over the issue of diversity continue, particularly with respect to issues such as free speech, community standards of civility, and the tension between group and individual rights on college campuses, one area that has received little study is whether or not the type of institution determines the benefits of a racially diverse student body (Martinez-Aleman & Salkever, 2001; Umbach & Kuh, 2006). These debates compelled researchers to examine the ideals of community and scholarship that are a part of the mission of a liberal arts education as stated in a study published by the Carnegie Foundation for the Advancement of Teaching (1990) designed to look at the ideal community in higher education. With the increase in racial and ethnic diversity, the ideal values of community and shared scholarship have been challenged in a liberal arts community (Kuh, 1995; Martinez- Aleman & Salkever, 2001; Martinez Aleman, 2000).

A liberal arts education is believed to embody the spirit of community and foster mutual intelligibility with an ever growing and changing student population. The Association of American College and Universities project "Greater Expectations: A New Vision for Learning as a Nation Goes to College" (2002) stated the essence of a liberal education for the twenty-first century was diverse and inclusive, seeking various perspectives, and wisdom from multiple cultures. A liberal arts education was designed

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to foster a learning environment in which individuals critically scrutinize subjects and discuss the objectives of their intellectual community (Farnham & Yarmolinsky, 1996; Hune, 1995).

In addition, a liberal arts education now is characterized by the promotion of diverse perspectives and fostering learning about a range of cultures and global issues (AAC&U, 2002). Many American colleges and universities advertise an environment that exposes students to diverse groups of individuals and a broad education. Although liberal arts institutions would seem to be the perfect place to support meaningful diverse interactions, due to the size and often focused mission, it is uncertain whether the benefits of diversity are equally experienced in all types of institutions.

A racially diverse student body is thought to create an environment that fosters interaction between peers from diverse backgrounds. Consequently, diversity of thought among college students in a set learning environment improves intergroup relations by challenging students to refine their thinking and creating opportunities for dialogue (Gurin, 1999; Hurtado, et al., 1999). For example, Light's (2001) research with 1,600 students at a number of universities demonstrates that diversity is important to student learning. Student interviews suggested that diversity should be planned in meaningful and purposeful ways throughout the first year. While it may lead to some stresses, the results were significant learning experiences.

Although most research points to the virtues of racial diversity, some suggests that a diverse student body is not beneficial. For example, some argue that diversity impedes the free exchange of ideas and undermines other desirable outcomes of the college experience (D'Souza, 1991; Wood & Sherman, 2001). Furthermore, it is

suggested that some diversity initiatives may harm, rather than improve, relations among different racial and ethnic groups (Wood & Sherman, 2001). Research indicates that minority student centers, minority student organizations and other focused centers and programs have proven worth, however they still often limit interactions between White and racial minorities (Harper & Quaye, 2007; Patton, 2006; Solorzano & Villalpando, 1998).

Although research in the area of diversity on campus has been robust and ongoing for several decades, early work in this area did not always take into account the relationships of White students and students of color. Many focused on increasing enrollment, deficiencies of students of color, and their ability to fit into the existing culture. In addition, many of these studies focused on large sample sizes. Although multiple studies conducted at large universities have produced findings which suggest that the presence of diversity is beneficial to the campus (Astin, 1993; Chang, 2001; Gurin, 1999), it is unclear whether similar results can be obtained at smaller institutions. It is understandable but not proven that students at large universities may have more exposure to diversity, since these institutions have the ability to enroll more students from various racial, ethnic and cultural groups. While liberal arts colleges may have the conditions that would encourage higher levels of engagement and interaction, gaps still exist (Kuh & Umbach, 2005). In a study by Gonyea et al. (2005) it was suggested that a significant disparity exists between students' expectations for diversity experiences and what liberal arts institutions actually provide.

Although large institutions have the ability to enroll more students from diverse backgrounds, the question remains whether or not the size and mission of a liberal arts

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institution is better suited to promoting the mission of racial diversity. As some research has demonstrated, the relatively small size of such schools promotes student-to-faculty interaction and peer-to-peer interaction, – interactions which are believed to be a major factor in student satisfaction and success (Allen, 1992; Anaya & Cole, 2001; Pascarella & Terenzini, 1991; Svanum & Bigatti, 2009; Valenic, 1995).

In contrast to their larger counterparts, many liberal arts institutions also have distinct missions which stem from their denominational roots, curricular designs, or both. These institutions often leave lasting impressions upon their students' attitudes and values (Kuh, Schuh, Whitt & Associates, 1991). Studies over many years indicate that liberal arts colleges produce consistently positive student outcomes which include higher levels of involvement often not found at other types of higher education institutions (Astin 1999; Pascarella & Terenzini, 1991). The Association of American Colleges and Universities' (2002) suggests that a liberal arts education may benefit students more when considering the social, cultural and financial challenges. However, these same assets may also constrain many institutions from serving diverse populations. For example, location and denominational affiliation will limit many of these institutions from attracting a diverse student body. In addition, many liberal arts colleges are fairly homogeneous in terms of the racial and ethnic backgrounds of both students and faculty. Consequently, liberal arts institutions have limited compositional diversity that severely constrains the possibility of students interacting with someone of another race or ethnicity (D'Souza, 1991; Kuh & Umbach, 2005; Milem, Dey & White, 2004; Milem, Chang & Antonio, 2005).

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A multitude of research exist examining forms of racial and ethnic diversity, structural, historical legacy, psychological and interaction that potentially influence behavioral and intellectual development of students on college and university campuses (Chang, 2001; 2002; Gurin, 1999; Hurtado, et al., 1999; Milem & Hakuta, 2000). In recent years, researchers have expanded these, with Milem, et al. (2004) suggesting a fifth dimension of compositional diversity.

> (1) *Compositional diversity* is the numerical and proportional representation of various racial and ethnic groups on campus (Milem, et al., 2005).
>
> (2) *Structural diversity* as defined by Milem, et al. (2004) focuses on the organizational/structural aspects of the institution. This is visible in the curriculum; campus decision-making practices, reward structures, hiring and admissions practices, along with other important processes that guide the campus.
>
> (3) The *historical legacy* of inclusion or exclusion signifies the continuation of segregated schools and colleges, which continue to affect the racial and ethnic diversity of some college campuses (Hurtado, et al., 1999; Milem, et al., 2005). Evidence of this is apparent in the policies on some campuses that continue to support and serve a homogenous student population on predominantly White campuses. The probability of interaction increases with a greater number of diverse students.
>
> (4) *Psychological climate* is related to the number and nature of diversity related initiatives a college or university provides to their students. This may include required multicultural courses, which may be a part of the general education

requirement, ethnic studies courses, cultural awareness activities and workshops

offered throughout the year, and cultural centers.

(5) *Diversity interactions* are represented by students' exchanges with racially and

ethnically diverse individuals. This also includes exposure to diverse ideas,

experiences, and information.

These forms of diversity are not mutually exclusive. Students often learn a significant

amount about diversity by interacting with other students whose culture and views are

different from their own. Although students will benefit from exposure to diversity

initiatives, the impact is greater when there is a greater amount of compositional diversity

(Pike & Kuh, 2006).

Demographic and enrollment trends clearly indicate that the nation's colleges and

universities have experienced increased compositional diversity in the past 30 years. In

1976 only 15% of all undergraduates were minorities, in comparison to 32% in 2007

(NCES, 2009). A large proportion of this change is attributed to the continued rising

numbers of Hispanic and Asian/Pacific Islanders. During this time the percentage of

Hispanic students has increase from 4 percent to 11 percent. African American students

began with 9 percent in 1976 and have fluctuated but risen to 13 percent in 2007 (NCES,

2009). While the number of African American, Hispanic, and Asian/Pacific islanders has

increased in the last 30 years, a large number of these students are continuing to attend

predominantly White institutions (NCES, 2002). However, in 1984 the number of

minority students attending minority-serving institutions was 38 percent; in 2004 reports

indicate an increase to 58 percent (NCES, 2007). In addition to historically Black

Colleges and Universities, other categories for minority-serving institutions now include:

Historically Black colleges and universities, Black-Serving Non-Historically Black Colleges, Hispanic-Serving Institutions, Asian-Serving Institutions, and American Indian-Serving Non-Tribal Colleges. There has also been a recent increase in enrollment in the last two years at two-year colleges. In 2008, 11.5 million students overall 18-24 year olds have enrolled in a two-year institution. 46% of all undergraduates were attending a two-year institution, and 55% of those students are Hispanic (American Association of Community College, (2008); Fry, 2009).

While campuses nationwide are becoming more racially diverse at the compositional level, such diversity alone is not sufficient since the chances of success for these students continue to be challenged by their first- generation status and socioeconomic backgrounds. These characteristics may often put them at a disadvantage and may lead to disengagement and lowered success rates that are often due to being minorities on a predominantly White campus (Allen, 1992; Cabrera, Amaury, Terenzini, Pascarella, & Hagedorn, 1999; DeSousa & Kuh, 2000).

The challenge is particularly acute in light of recent graduation data. More than half of the students who enter higher education will not receive a bachelor's degree within six years (Berkner, He, & Cataldi, 2002). The U.S. Census Bureau (2008) reported that 32 percent of White Americans have earned a bachelor's degree in comparison to 52 percent of Asian Americans, 19 percent of African Americans, 13 percent of Hispanics and 9 percent of American Indian-Alaskan Natives. The Minorities in Higher Education Twenty-second Annual Status Report (2006) stated that among students who began college in 1995-96, Asian Americans had the highest rate of completion (62 percent), followed by White students (58 percent), Hispanics (42 percent) and African Americans

(36 percent). African Americans most often had not obtained a degree after being

enrolled for five or more years (Status Report, 2006). Most recent data finds nationwide

college graduation rates for African American students at 43 percent, 20 percentage

points behind White students (JBHE, 2007). In a census taken in the last ten years, only

16% of African American, 11% of Hispanic and 9% of Native Americans earned a

bachelors' degree (Census, 2000). These statistics continue to create challenges to

diversifying colleges and universities.

Student Engagement

With the continued attention from education policy makers on college graduation

rates and the quality of undergraduate education, discussions and research have

increasingly focused on student success, learning and quality of learning (Kuh, Kinzie,

Buckley, Bridges, & Hayek, 2007; Kuh, Kinzie, Schuh, Whitt, & Assoc. 2005). Research

suggests that what students do during college often matters more than what they learn and

whether they persist to graduation, than whom they are or where they attend college

(Astin, 1993; Pascarella & Terenzini, 2005). Pascarella and Terenzini (2005) suggested

that the impact of college is most often determined by individual student effort and

involvement in curricular and co-curricular programs offered on campus. However, the

majority of this impact is influenced by the institution. A student's participation and

engagement in educationally purposeful activities can directly influence the quality of a

student's overall college experience (Kuh et al., 2005, 2007). High levels of engagement

along with other factors are believed to relate to student satisfaction, learning, and

persistence (Astin, 1999; Pascarella & Terenzini, 2005; Pike, 1993).

The concept of engagement often focuses on the institutional environment and its perception by students as inclusive and affirming (Kuh et al., 1991; Kuh et al., 2005; Pascarella & Terenzini, 2005). Continued research suggests the opportunity to participate in the complete academic experience may not exist for some racial minorities (Gossett et al., 1996; Fischer, 2007; Fries-Britt & Turner, 2001; MacKay & Kuh, 1997). Minority students often complain of being isolated in the classroom, ignored by professors during class, and excluded from informal conversations with White students. They also cite the use of racial stereotypes and unfair grading practices by faculty (Gossett, et al., 1996; McCormack, 1995). Further, they often note that the environment was unwelcoming and isolating due to the lack of a critical mass of students, faculty, and administrators of color (Allen, 1992; Davis, Dias-Bowie, Greenberg, Klukken, Pollion, Thomas, & Thompson, 2004; Fleming 1984; Steele, 1999).

An unwelcoming academic environment may also hinder a student's social interaction. Several researchers (Gonzalez, 2003; Smith, 2007; Watson & Kuh, 1996) suggested that the college environment has a major influence on a student's personal growth. Relationships and activities with students, faculty, and administrators would greatly influence student educational gains. Students who were more involved with campus life often made greater gains in their social and educational development (Cole, 2007). The campus environment for students of color along with quality interactions often will make the difference in their overall college experience (Wolf-Wendel, Ward, & Kinzie, 2009).

In this regard, the environmental congruence -- the fit between students' needs, aspirations, values, goals, expectations and the environment's ability to respond to them -

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- is important. Chang (2001) and Hurtado (1996) noted the importance of building a supportive campus environment to help students feel welcome and respected as a necessary condition to facilitate student engagement and retention. When students feel important and connected to their environment, their satisfaction and retention increases (Chickering & Reisser, 1993; Gossett, et al., 1996). As Rosenberg and McCullough (1981) suggested, students must feel a sense of "mattering" to be successful. They defined this as a feeling that "others depend on us, are interested in us, are concerned with our fate, or experience us as an ego extension which exercises a powerful influence on our action" (p.165). Their conclusions suggested this was applicable for all races. However, a sense of marginality, a feeling of not being cared for, and constant searching for a connection with peers or the institution can have a detrimental effect upon a student's self worth.

Campus Racial Climate

Racial tensions and incidents of ethnic and racial discrimination continue to take place on college campuses in America (Chang, 2000; Suarez, et al., 2003). Recent incidents at the University of Mary Washington in which posters suggesting the return of slavery were hung in a residence hall (Burnell & Toney, 2007) and at the University of Maryland where a noose was reportedly hung outside the Nyumburu Black Cultural Center (Schoetz, 2007) are just two examples. Moreover, campuses continue to struggle with bias related incidents, differential treatment, and stereotyping by students, faculty, staff and administrators.

Research suggested that African American students are more likely to experience direct and indirect forms of racism (Ancis, Sedlacek & Mohr, 2000; Gossett, et al., 1996;

Suarez, et al., 2003). These incidents have taken place at both small and large public institutions. McCormack (1995) found an increase in racial discrimination against both African American and Hispanic students. Her study discerned that the most common type of discrimination was verbal harassment in the form of racial slurs, exclusion from activities, and physical violence.

Student perceptions of discrimination and the campus climate often vary along racial lines. Gossett et al. (1996) in their examination of a PWI found that non-African American students were not aware of perceived discrimination experienced by African American students. Various studies (Anis, et al., 2000; Cabrera & Nora, 1994) noted that White students do not have similar attitudes or perceptions of discrimination as African American and Hispanic students. Instead, White students most often had a favorable assessment of the campus racial climate than did their minority counterparts (Fischer, 2007). Additionally, Asian students reported feeling pressure to conform to racial stereotypes regarding academic performance, and social behaviors in order to be accepted. Experiences of discrimination by students of color can lead to the perception of a hostile campus environment. Research continues to demonstrate that the campus climate can often determine student success or failure (Astin, 1993; Chang, 2001; Pascarella & Terenzini, 1991; Pascarella, Edison, Nora, Hagedorn & Terenzini, 1998; Sedlacek, 1996).

More universities are developing and attempting to sustain programs focused on encouraging diversity, while at the same time the effects of these programs on the campus climate are being studied (Helm, et al., 1998). Research suggested several conditions affect the racial climate for students: the perceived value of diversity, equal

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power relationships among the groups, and clearly defined program goals (Sedlacek, 1995). Although such programs can have a positive impact on the campus climate, students from different racial and ethnic groups often have very different needs and perceptions of the racial climate (Ancis, et al., 2000; Cabrera & Nora, 1994; Chang, 2003). Research by Wood and Sherman (2001) concluded that a diverse student environment does not always lead to positive diversity outcomes or a positive perception of the climate. For diversity initiatives to really change the racial climate on campuses a "non racist" climate is required. Hurtado et al. (1999) believes this can only happen by altering the legacy of exclusion, changing the organizational structure, and reshaping the psychological and behavioral climate of the campus.

The diversity of a campus should provide students with opportunities to interact with students who are different from them and ultimately build a more supportive environment. Merely changing the structural diversity of the campus does not always improve the climate of the campus because positive changes are often dependent upon the quality of interactions.

Purpose of the Study

This study examined the relationship of compositional diversity (the numerical and proportional representation of various racial and ethnic groups on campus, informal interactional diversity (students' exchanges with racially and ethnically diverse individuals), and the perception of campus racial climate (external and internal factors, along with the structure and history of the institution) at selected public liberal arts institutions. It drew from the theories of Hurtado et al. (1998), and Milem et al. (2005) to understand racial campus climate in addition to Astin (1993), Kuh (1995), and

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Chickering and Gamson (1987), to understand minority student engagement. The study

sought to further understand the impact of the campus, particularly with respect to

students' perception of the climate, on informal interactional diversity. This study built

upon prior research by Kuh and Umbach (2005), Pike and Kuh (2005) and Wood and

Sherman, (2001) who have used the National Survey of Student Engagement (NSSE) to

examine the diversity experiences of students at liberal arts institutions as defined by The

Carnegie Foundation for the Advancement of Teaching (McCormick, 2001). The NSSE

is an annual survey of first-year and senior students which attempts to measure the degree

to which students participate in educational practices that are linked to a variety of

outcomes of college (Kuh, 2001).

This study focused on examining and comparing the institutions that are members

of the Council on Public Liberal Arts Colleges (COPLAC) as well as other selected

Virginia institutions that are considered "peer institutions" to the University of Mary

Washington (UMW). The COPLAC mission is to identify and support quality public

liberal arts and sciences institutions (www.coplac.org/). These colleges are distinguished

by their commitment to the provision of a superior education to undergraduate students

and have been recognized nationally as outstanding in many ways, including small

classes, innovation in teaching, personal interactions between students and faculty,

opportunities for faculty-supervised research and supportive atmospheres. Most of these

colleges are located in rural or small towns, which often may be homogenous and lack

structural and compositional diversity (Kuh & Umbach, 2005).

The study explored student experiences with racial diversity at specific liberal arts

institutions and examined institutional factors such as interaction, engagement and

institutional programming affecting those experiences and the perception of the campus climate. It was guided by the following questions:

1. Is there a significant difference in the perception of the campus climate between freshman and seniors, by institutional type, or by gender, or race?

2. Is the variance in interactional diversity predicted by student characteristics, institutional factors, compositional diversity, or student perception of campus climate?

Definition of Terms

Students of Color

Students of color included African American students, Latino and Hispanic students, Asian Pacific American students, Native American students and Multi-racial students. Often literature referred to this group as students of color, minority or non-majority.

Campus Racial Climate

The campus racial climate is considered the overall feel and structure of the campus environments, institutional policies, services provided for students and relationships and interactions with faculty, staff and administrators (Hurtado et al, 1998).

Interactional Diversity

Interactional diversity is the amount and extent to which diverse groups of students, faculty and administrators interact with one another in and out of class (Gurin, 1999; Gurin, Dey, Hurtado & Gurin, 2002).

Compositional Diversity

The proportional representation of students by race and ethnicity on any specific campus of higher education encompasses compositional diversity (Milem, Chang & Antonio, 2005).

Significance of the Study

Liberal arts institutions create unique and distinctive environments for any student and especially students of color in relation to diversity experiences. Students at larger institutions potentially have the means for a more varied and positive experience since these institutions have the ability to inherently foster a more diverse compositional environment. These institutions also have the ability to offer more diversity related activities, and greater opportunities for collaborative learning. However, the results for liberal arts colleges overall have varied in terms of diversity experiences. For historical and logistical reasons many liberal arts colleges are not racially or socio-economically diverse and are often not viewed as desirable by students of color or students from underrepresented populations (Rudolph, 1990). These indicators suggest that many liberal arts colleges will not score well in terms of compositional/structural diversity or measures for the perceptions of the climate. This study provides additional understanding of how diversity is experienced at select liberal arts colleges.

CHAPTER II – LITERATURE REVIEW

Demographic changes and institutional policies that focus on diversity are having an impact on the nation's campuses. Increased enrollment of students of color provides all students the ability to better prepare for life by living and learning in a diverse higher education campus environment that will emulate the changing society (Chang, 2000). Some agree that a diverse student body contributes to positive educational outcomes and a supportive campus environment (Hurtado, et al., 1999; Gurin, 1999). However, it is also understood that a diverse student environment does not always guarantee positive diversity outcomes or positive education benefits for students of color. Often the racial environment on campuses for students of color has proven to be unwelcoming, unengaging and hostile. Racial diversification may lead students of color to experience harassment, offensive and/or intimidating behaviors – behaviors that will eventually interfere with learning (Fries-Britt & Turner, 2001; Rankin & Reason, 2005). Thus, the purpose of this study was to examine the students' perception of the campus climate and engagement as it pertains to interactional diversity with the campus in the context of a liberal arts institution. Understanding institutions that state a shared mission of a liberal education becomes important in better identifying the experiences that students of color may or may not engage in and thrive.

In this chapter, current literature in the areas of minority student access to education, student engagement, and a liberal arts education will be examined. The chapter concludes with a review of the literature on campus racial climate, and the effects of interactional diversity on students of color.

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Data gathered by *The Chronicle of Higher Education* (2001) demonstrated that

half of the U.S population will be racial/ethnic minorities by the year 2030. Demographic

shifts, globalization, and access to postsecondary education, are changing the

composition of the nation's colleges and universities (Trow, 2001). The National Center

for Education Statistics (2006) forecasts a steady increase in the number of students who

will attend college in the coming years. Consequently, colleges and universities will

become increasingly diverse as students of color are expected to comprise nearly two-

fifths of the total undergraduate enrollment by 2015 (2006). Reports in *The Chronicle of*

Higher Education (2005) indicated that in California, Texas, Florida, and New York

minority students make up at least one third of the student body nationwide. In the fall of

2002, minority student enrollment was, 51%, 41%, 37% and 32% respectively (*The*

Chronicle of Higher Education Almanac). In addition, the gap between rich and poor

countries will widen and the need for immigration will increase. With this new shift in

globalization, many countries such as Afghanistan and Pakistan will have increased birth

rates. Africa may have more people than all of North America. India could equal the

population of China, and Pakistan could become the third most populous nation in the

world (Keller, 2001). Based upon this information it is assumed that college students will

increasingly come from underrepresented groups--including students of color--which will

cause a shift in the racial composition for many colleges and universities throughout the

U.S. (NCES, 2002).

From the perspective of the past two decades, the shifts have already been

dramatic. In 1976, students of color comprised 16% of all undergraduate students. By

2000, that number grew to 29% (NCES, 2000), and by 2007 32% were minority students (NCES, 2008). Students of color on college campuses increased by 61% between 1984 and 1994. Total minority enrollment at the nation's colleges and universities rose by 50 percent to 5 million between 1995 and 2005 (American Council on Education, 2008). As that report demonstrated, students of color made up 32 percent of the nearly 17 million students on America's college campuses. In addition, students from mixed parentage will also increase in the coming years. Lind (1998) predicts that students of mixed parentage will be the new majority of the U.S. population by the mid 21st century. Enrollment statistics for 2007 reported 3 percent are listed as nonresident aliens for whom race/ethnicity is not reported (NCES, 2008) In the last 30 years, interracial marriages increased more than 80%; in 1995, 1 in 12 marriages were interracial (Keller, 2001). This change will produce undergraduate students who will not fit neatly into any of the categories that institutions currently use. This has resulted in colleges and universities seeing more diversity by student race, ethnicity, and country of origin.

The ETS report also indicated that the number of minority students will increase from 29.4 percent to 37.2 percent by 2018. The number of minority students in the District of Columbia, California, Hawaii, and New Mexico is anticipated to exceed the number of White students attending college. In Texas, minority students will constitute nearly 50 percent of the total student population, while in states such as New York, Maryland, Florida, New Jersey, Louisiana and Mississippi, non-White student enrollment may exceed 40 percent of the total undergraduate population. Collectively, this is important in understanding the changes in the racial composition of institutions and the

implications for not only the demographics of entering students, but also the climate such students may experience.

According to the *Minorities in Higher Education Twenty-second Annual Status Report* (2006), the high school completion rate for African Americans age 18 to 24 rose from 75.6 percent in 1992-94 to 77.8 percent in 2002-04. The largest increase in high school completion was among Hispanics who increased from 56.6 percent in 1992-94 to 64.4 percent in 2002-04. However, Hispanics still fell behind Whites and African Americans in high school completion. High school completion for Whites was 87.6 percent in 2002-04, which increased from previous years. Between 1993 and 2003 the percentage of African American high school graduates who went to college rose considerably to more than 1.9 million students. Total U.S. college enrollment of African American men and women ages 18 to 24 increased from 15% in 1970 to roughly 25% in 2003. Since the 1980s the number of Hispanics enrolled in colleges tripled (Schmidt, 2003).   However, from the late 1990s and into the new millennium, college enrollment rates for African Americans and Hispanics were still behind their White peers. In 2003, 58.3 percent of all African American high school graduates enrolled in college within one year. Hispanic enrollment led all racial/ethnic groups, up 75% to more than 1.4 million students. Asian-American enrollment increased to more than 987,000 in the 10-year period between 1993 and 2003--up 43.5%. American Indian enrollment grew by 38.7 percent in the 10-year period, up from 117,000 in 1993 to nearly 163,000 in 2003. Enrollment at four-year institutions increased 50 percent for American Indians. While continued growth is evident, Hispanics were not enrolling fast enough to keep up with demographic changes. For Hispanic students, a lower proportion completed at least an

associate's degree when compared with those ages 30 and older (ACE, 2008). They are still the least educated major racial or ethnic group (Schmidt, 2003). These numbers still suggested the persistent gap in college enrollment between Whites, African Americans, Hispanics, and Native American students.

According to several reports (Milem & Umbach, 2003; Smith, 1997), many American cities and suburbs are becoming increasingly non-White. Trends in residential segregation are already reflected in secondary schools and greater expansions to metropolitan areas throughout the nation are direct implications for enrollments at colleges and universities. Trent et al. (2003) argued that low-income and minority children in the U.S. have insufficient access to quality schooling experiences. While there were many poor White and Asian students in school systems throughout the country, those students who lived in concentrated pockets of poverty attend schools which have greater numbers of ill-prepared teachers, fewer college preparatory classes, and were rife with conditions that negatively affect student achievement (Chang, Witt-Sandis, & Hakuta, 1999; Trent et al, 2003). These students are usually Black, Hispanic and Native American (Chang et al., 1999). While quality schools may exist for some, schools in the U.S. did not provide all students, regardless of demography, with quality educational experiences that prepared them for college. Experts (Chronicle, 2003) suggested that schools serving Hispanic students were some of the nation's most segregated and poorly financed, and most often poorly staffed. Additionally, Hispanic students who completed high school were less likely than White students to have taken a rigorous college-preparatory course (Schmidt, 2003). White students have historically been extended privileges and opportunities, whether acknowledged or not, that often

create distinct academic advantages. More specifically in relation to this study, a report by the Southern Regional Educational Board (2005) stated the Commonwealth of Virginia has a 65% graduation rate, with African Americans and Hispanics as 18% of the graduates; a 2% increase since 1995. As Trent et al. (2003) concluded, race remained a crucial factor in an individual's academic experience and serves to regulate access to opportunities which have consequences for academic performance.

Persistence and Educational Attainment

Even with this upward trend in college enrollments of African American students, the total percentage enrolled in colleges and universities continues to be disproportionate to their share of the total population. Equity in educational opportunity means that African American students need to enroll in college, but they also must enroll at rates that more closely match their presence in the population, and they need to graduate. Persistence and educational attainment are important indicators of success after college. Although the number of students from underrepresented groups who are admitted to colleges and universities has increased, a significant gap in degree attainment, when race is considered, remains. Most stunning is the fact that of those entering college, 20 percent of African Americans and, 12.5 percent of Hispanic Americans do not persist beyond the first year (NCES, 1998).

How do we account for this lack of completion? One possibility lies in differences in academic preparation (Tinto, 1987). These differences, Tinto explained, were due to prior educational experiences at elementary and secondary school levels that often were more favorable to non-minorities than minorities. However, other researchers have identified factors such as changes in student financial aid awards and difficulty

financing higher education as the primary reasons for the lack of persistence witnessed among African American and Hispanic American students (Olivas, 1985; Porter, 1990). Other researchers (Schmidt, 2003) suggested that getting larger numbers of Hispanic students through college will require focusing on educational differences among the culturally and linguistically different members of the community since the enrollment of Cuban-Americans and Mexican-Americans are extremely different.

Diversity and Student Engagement

Environments are both influenced by and exert influence on people who live in them. This perspective is an interactionalist theory defined as the human aggregate (Strange & Banning, 2001). If campus environments are human aggregates, then the major changes in the racial composition of the campus will likely change the climate of the environment; specifically, the psychological and behavioral benefits (Hurtado, et al., 1998). Findings from national longitudinal studies continue to provide evidence that a multicultural environment has a positive effect upon all students' educational experiences.

Research by Astin (1993) and Kuh et al. (2007) showed that time and energy devoted to educationally purposeful activities is the single best predictor of student learning and personal development. The theory of engagement originally influenced by the theory of involvement (Astin, 1985), and indicators of good practice by Chickering and Gamson (1987) give support to the concept of student engagement. This concept encompassed two key elements: (1) the amount of time and effort a student puts into one's studies and activities along with, outcomes that denote student success, and,(2) the division of human and other resources in developing learning opportunities and services

to encourage students to participate and benefit from these activities. Engagement is a two-part contract that includes what the student does and what the institution does. Astin (1984) suggested it is the amount of physical and psychological energy that the student devotes to the experience. Researchers often use the concepts of involvement and engagement interchangeably with the determination that it is about quality of effort of the student. Student engagement focuses on the time and energy students invest in educationally purposeful activities and the effort institutions devote to providing effective educational practices (Kuh, 2001). The difference, highlighted by Harper and Quaye (2008), is that it is possible to be involved but not engaged.

The National Survey of Student Engagement (NSSE) is the project that helped to develop the concept of engagement. While the concept of student engagement is used in multiple ways on college campuses, for the focus of this study, the term was used relative to the research related to the NSSE. Engagement is not just an extension of involvement but the connection of student behaviors and effective educational practice (Wolf-Wendle, Ward, & Kinzie, 2009). It is the connections between student behaviors and perceptions of the institution and psychosocial engagement (Kuh, 2001; Kuh et al., 2008). It selects activities that can be influenced directly and indirectly to improve student learning.

Researchers are only beginning to understand the relationship between racial diversity and student experiences while in college. Gurin (1999) suggested that a diverse student body creates a unique learning environment which increases the probability of interaction between and among peers from different backgrounds. Students with increased interactions and more diversity experiences often revealed gains in critical thinking (Gurin, 1999). Tierney (1993) argued that students who interact with people of

races other than their own learn about the realities of a multicultural world. Gurin's work also suggested that students who experienced the most diverse interactions on campus are the most engaged. It suggested that universities that are diverse offer a climate that produced active engagement and fostered deeper thinking in more complex ways.

Increased experience with diversity was also reported to be positively linked with retention rates, degree aspirations, and more frequent participation in community engagement (Chang, 1999). Astin (1993) and Chang (2001) reported that diversity experiences favorably influenced overall satisfaction with college experiences and the perception of the campus climate. These reports indicated that engaging students from different backgrounds and cultures develops fundamental skills that are essential for a successful life during and after college.

It is evident that college and university campuses are changing at a rapid pace. College is a place where many students will experience their first encounter with a diverse community (Museus & Quaye, 2009; Smith, 1997). This will create opportunities for students to interact with racially and ethnically different peers which will become even more pronounced in the years to come, as will the expectations that these interactions will produce greater educational gains and sensitivity to racial issues (Cole & Jackson, 2005). Research has found that a racially and ethnically diverse campus significantly enhances students' intellectual development in several ways: learning outcomes (Gurin et al., 2002), openness to and understanding of diversity (Antonio, 2001; Chang 1996), higher levels of academic development (Milem & Hakuta, 2000), increased intellectual engagement, critical thinking (Pascarella, et al., 1996) and intellectual self-concept (Chang, 1999).

Evidence from leading scholars demonstrated that a diverse educational environment is essential for a rich educational experience (Hurtado, et al., 1999; Milem & Hakuta, 2000). These experiences are carried over into future life choices. Numerous studies have shown that campus communities that are racially diverse created a more varied educational experience for all students thereby preparing them for the workforce and participation in a democratic society (Chang, 1999; Hurtado, 2001; Milem, 1994; Orfield & Kurlaender, 2001).

A Liberal Arts Education

Researchers and scholars would agree that it is imperative that colleges and universities prepare students to function effectively in a diverse society (Association of American Colleges and Universities, 1995; Bowen & Bok, 1998). From the literature it appears that the field of higher education is making a significant impact on student learning and development by providing diversity experiences for all students (Chang, 2002; Gurin, 1999; Hurtado et al., 1998, 1999). Admissions materials from a variety of colleges and universities certainly promise to expose students to all forms of human diversity. However, it is not always clear if the benefits of diversity are limited to specific types of institutions.

It is conceivable, but not always true, that larger universities have the potential to have a more diverse population since they have a larger pool of students. Institutional characteristics such as location, size and selectivity can play an important role in the selected pool of students and the interaction with diverse peers (Chang, 2001; Hu & Kuh, 2003). Studies suggested that it is not enough to only bring students from historically underrepresented groups to campus to improve the campus racial climate (Hurtado et al.,

1998, 1999).   However, as Chang (1999) indicated, many studies assume that more

students translate into a more diverse student body. This does not take into account that

the use of non-White students as a measure for a diverse campus will not be applicable in

all cases. Furthermore, it does not take into account the heterogeneity of Historically

Black Colleges and Universities (HBCU) that would be considered highly diverse

because the majority of the student members are non-White. However, HBCUs promote a

very diverse campus when considering the overall makeup of the students, faculty and

staff.

When reviewing higher education institutions it is suggested that liberal arts

colleges have the ability to provide quality experiences for undergraduate students. They

are believed to possess a spirit of community, linked to their small size that is conducive

to student-faculty interaction and meaningful relationships among peers (Blaich et al.,

2004; Hersch, 1999). Moreover, due to their distinctive denominational roots or

curricular arrangements, many actively shape the values and attitudes of their students

(Kuh et al., 1991).

The true test of a liberal arts college is whether or not its students are able to

appraise the needs and issues of the world. The curriculum should highlight intellectual

and practical knowledge, skills, and competencies that can then be utilized inside and

outside the classroom. These experiences should help students to integrate this

knowledge into their learning and their lives. Astin (1999) indicated that liberal arts

colleges show consistent positive student outcomes not found at any other type of

American higher education institution. One study using results from the NSSE (2003)

indicated liberal arts colleges engaged students more frequently in activities that

encourage integration in curricular and co-curricular experiences (Kuh, 2003). Some of the unique qualities presented by liberal arts colleges should make them the perfect environment to promote diversity. Liberal arts colleges are most often small in size, and are able to develop unique missions that will promote specialized learning for students. Liberal arts college students took fewer online courses than students at other colleges and universities, suggesting more faculty-student interaction. They were also more satisfied with their educational experience and reported more experiences with diversity than their counterparts at other types of institutions (Kuh, 2003).

However, these features may also be a deterrent to the diversity experiences on these campuses. Due to location or denominational affiliation, many of these institutions have a homogenous student body and faculty. These institutions also tend to be located in rural, and thereby less diverse, locations. These institutions are usually not selected by students from underrepresented populations (Umbach & Kuh, 2006). Findings of other studies indicate students of color do not find the liberal arts college environment as supportive as other students (Hu & Kuh, 2003; NSSE, 2001). Under such constraints, the opportunity for students to interact with students and faculty from other racial and ethnic groups diminishes. It is reasonable to assume that students attending liberal arts colleges may not have the same opportunities to experience diversity as their counterparts at larger institutions.

Variables of the Campus Climate

In attempting to explain the multiple variables that will impact the racial climate, many researchers draw from and expand upon the work of Hurtado and others (Hurtado et al., 1998, 1999). This approach provided an understanding of the interactions of

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internal and external forces. In the framework advanced by Hurtado and others, the climate is not limited to perceptions and attitudes; it also includes the structure of the institution, the history, and the interactions of constituents. The framework also supported the belief that students are educated in racial contexts that are different on each campus. Ultimately, the climate may be shaped by a range of external and internal factors. Governmental policies, programs, initiatives and sociohistorical forces are key external forces that shape the racial climate. While some institutions have a history of recruiting and graduating students of color, many predominantly White institutions share a history dominated by the exclusion of students of color (Milem, et al., 2005; Thelin, 1985). The research suggested there are still policies at institutions that serve homogeneous populations that prevent interaction across racial and ethnic communities (Hurtado et al., 1998, 1999). Financial aid policies and programs, state and federal policies regarding affirmative action, and the way each state differentiates institutions within its own state system are examples of factors that will influence the racial climate. Other additional external forces include events or issues related to racial diversity confronting society at large. How people view or experience these issues will continue to have an impact on their perceptions of race and diversity.

Hurtado and colleagues (1998) suggested that the external forces interacted with internal forces to produce the racial climate of the institution. Four dimensions are believed to result from, and also influence the educational programs and practices at an institution: (1) structural diversity, (2) historical legacy of inclusion or exclusion, (3) psychological climate, and (4) behavioral climate. Recent research by Milem, et al. (2004) has developed the category termed compositional diversity that more accurately

describes the numerical and proportional representation of various racial and ethnic groups on campus as opposed to the original term structural diversity developed by Hurtado et al. (1998,1999). These five dimensions help create understanding of diversity on college campuses.

1. The increase of the compositional diversity on a campus will suggest to those inside and outside of the institution that diversity is a priority for the campus. Hurtado et al. (1999) suggested this is the dimension that most institutional leaders think about when attempting to improve the racial climate on their campus. However, this can also be seen as a problem since often this may be the only dimension on which the university focuses. Milem et al., (2005) suggested that the composition of the institution is important for providing important opportunities for teaching and learning; however this can also present significant challenges to achieving campus diversity.

2. The dimension of organizational/structural diversity has benefits for some groups that are embedded into these organizational and structural processes (Milem, et al., 2004). This dimension appears in the curriculum; campus decision making processes related to budget; reward structures, hiring practices, admissions practices and tenure decisions.

3. The historical legacy of inclusion or exclusion is evidenced in the resistance to desegregation. Research suggested campuses are capable of achieving varying levels of success in creating supportive climates for students of color (Richardson & Skinner, 1991). Often this is dependent upon the institution's initial response to the entrance of diverse students and the establishment of

specific programs. Additionally, the institution's attention to the psychological climate and intergroup relations on campus once students of color are admitted is a factor.

4. Recent studies regarding the psychological dimension of the campus climate indicated that racially and ethnically diverse administrators, students, and faculty will view the campus climate differently (Hurtado et al., 1998, 1999). The position of the individual whether and insider or outsider will often contribute to their views of the campus climate (Berger & Milem, 1999; Hurtado et al., 1998, 1999).

5. Research on the behavioral dimension of the institutional climate suggested that increased involvement in campus life is important in having a successful college experience for undergraduates (Astin, 1993). Gurin (1999) suggested that a racially and ethnically diverse learning environment provides the type of complex social structure that stimulates the development of active thinking processes. This type of diversity is related to enhanced intellectual development (Antonio, 2001; Chang et al., 1999; Pascarella & Terenzini, 2005; Umbach & Kuh, 2006), gains in personal and social development (Chang, 1999; Umbach & Kuh, 2006) and positive perceptions of the campus environment (Chang, 1999; Gurin, 1998; Umbach & Kuh, 2006).

These five dimensions provide an understanding of how the campus climate is shaped and the possible effects diversity efforts have on campuses. Additionally, studies indicated that these dimensions are interconnected, even though separate and unique.

Research indicated that compositional diversity is positively related to informal interactional diversity. Students at more diverse institutions interact more frequently with diverse peers than do students attending homogenous institutions (Chang, 1999; Loo & Rolison, 1986). It is possible that interaction with diverse peers is also influenced by student characteristics such as being a member of a minority group, parental education, academic preparation, pre-college experiences with diversity, and chosen major. Institutional characteristics such as location, size and selectivity play an important role in the interaction with diverse peers (Chang, 2001; Hu & Kuh, 2003).

Positive effects of informal interactions will depend upon the nature and quality of the interactions students have with one another. It is not enough to bring students from historically underrepresented groups to campus in an attempt to improve the campus racial climate. Optimal outcomes are produced when the groups are of equal status, common goals are shared, inter-group cooperation is fostered, institutional leaders support group equality and there are extended opportunities for group members to become acquainted (Hurtado, et al., 1999). There is sustained evidence suggesting that a positive diversity experience influences a student's perception of the campus climate (Antonio et al., 2004; Chang, 2001; Milem & Hakuta, 2000; Pike & Kuh, 2006).

In contrast, some argued that merely having students of various races on campus has no tangible benefit for the student body or the institution (Wood & Sherman, 2001). According to this view, efforts to diversify the student population do little more than produce a student body that looks different. DeSouza (1991) argued that diversity initiatives may harm, rather than improve, relations among different racial and ethnic groups. Similarly, while Chang (2001) acknowledged that although African American

students at Predominantly White Institutions (PWIs) will likely alter the distribution of viewpoints, he concluded that it would take a critical mass of African American students to have a profound effect on the distribution of opinions when the student body is predominantly White. He also suggested that two students of the same race are more likely to share similar opinions about certain social, political, or economic issues than two students of different races.

Campus Climate

Studies on campus climate continue to influence higher education research. Studies by Ancis et al, (2000); Hurtado, Carter and Spuler (1996); Chang (2000); Fischer (2007); Fleming (1984); Hernandez (2000); Hurtado (1994); Hurtado, Cabrera, Terenzini, Pascarella, and Hagedorn (1999); Locks, Hurtado, Bowman, and Oseguera (2008); and Suarez, Orellena, Portillo, Rowan and Andrews (2003), consider the ways that a climate of prejudice and discrimination—in both the classroom and the campus at large—impact the lack of persistence observed among minorities students. Such research argued that student perception of discriminatory behavior interferes with integration into the social and academic environment. In addition, associated psychological and sociocultural stress can lead to maladjustment (Smedley, Myers, & Harrell, 1993). Although it is understood that students experience a variety of stressors, experiences of discrimination and prejudice are particularly potent. Such experiences negatively impact academic performance and they are unique to minority students and women.

Fischer (2007) reported that Black students had higher perceptions of negative campus racial environments; Asian and Hispanics had similar perceptions. Meanwhile, White students had the least negative perceptions of the campus racial climate. In

addition, in such environments, there was a perception of intolerance from the institution toward the members of minority groups. This intolerance and lack of support further reinforced extant prejudice and discrimination while simultaneously fostering an unwelcoming campus climate (Feagin, Vera & Imani, 1996; Hurtado, 1992, 1994; Hurtado et al. 1996). This climate may result in lower involvement on campus, negatively influence cognitive development, and ultimately, drive decisions not to persist to graduation (Smith, 1992, Tracey & Sedlacek, 1985, 1987). Negative perceptions of the campus racial climate can undermine satisfaction with the institution for all groups (Fischer, 2007). Insufficient interaction with other students on campus or if experiences are seen as negative may influence students to leave the institution (Fischer, 2007). Pascarella and Terenzini (2005) reported that the level of student involvement and integration at an institution are critical factors in a student's persistence to graduation. Continued exposure to a climate of discrimination has negative effects upon minority students' social, psychological and intellectual growth (Hurtado, 1994; Hurtado, et al., 1996). While many ultimately succeed, they do so in the face of challenges that continue to erode their academic confidence and performance (Fries-Britt & Turner, 2001). Students often felt they must prove their intellectual competence and combat stereotypes that threatened to impede their academic progress (Fries-Britt & Turner, 2001; Smith, 1997).

Despite this research, there are inconsistencies in how to measure a student's experiences with discrimination and prejudice. Some researchers have measured the effects by looking at adjustment problems with curriculum, campus services, faculty, peers and administrators (D'Augelli & Hershberger, 1993; Nasim, Roberts, Harrell &

Young, 2005). Others have examined racial tension and the ability to communicate with students of other ethnic backgrounds. This perceived tension may create mistrust between minorities and campus administrators (Hurtado, 1992). Finally, researchers have studied students' abilities to understand and cope with the stress of racism (Baldwin, Chambliss, & Towler, 2003; Lopez, 2005; Tracey & Sedlacek, 1987).

Overall, existing research does not produce a clear consensus. Even though there is support for the view that prejudice negatively impacts student outcomes when a single minority is examined (Hurtado, 1992), the results are less certain when more than one minority group is studied simultaneously. Cabrera and Nora (1996) suggested that minorities perceived more acts of discrimination and prejudice than Whites and that these perceptions had an indirect effect on the minority student's decision to persist. Additionally, White and minority students had similar responses to perceived discriminatory behavior.

Students of Color Mattering and Marginality

"Will I matter to anyone when I am at college?" This is often the question new students ask when entering college. Schlossberg (1989) stated that building a supportive campus community to help students feel welcome and respected is a precondition to facilitating student development and increasing retention. When students feel important and have a "fit" between themselves and their environment, their satisfaction and retention increases (Chickering & Reisser, 1993; Schlossberg, Lynch, & Chickering, 1989). Although research has shown that students of color experience college differently than White students, it is not always clear whether they experience college differently when attending institutions that emphasize multiculturalism (Rankin & Reason, 2005).

Furthermore, it remains unknown whether or not students of color benefit from a multicultural environment as much as a White student (Villalpando, 2002).

As the number of minority students increased, the literature indicated that these students felt isolated and alienated by their experiences with a hostile campus environment (Allen, 1992; Fleming, 1984; Steele, 1999). Research has suggested that the lack of a "critical number" or "critical mass" of students of a specific racial group inhibited students from feeling safe and comfortable. Studies in higher education have shown that it is not the percentage of overall minority students but rather their absolute numbers, or a "critical mass," of a racial or ethnic group that served as a significant predictor of student comfort (Fleming, 1984; Hurtado, 1994). Critical mass has been defined as a number of students from the same racial/ethnic group on campus who develop their own network on campus (Fleming, 1984). The connection students feel often occurs when institutions have successfully recruited and retained a significant number of racial and ethnic minority students. Fleming (1984) claimed that without such a critical mass, students are reluctant to participate in programs that do not have their needs in mind. Another study suggested that the number of minorities is not as important as the size of the campus or the community that the college is located. Tuch (1987) proposed that community size and location are positively related to racial tolerance among members of a community.

A comparison of the literature revealed African American students have different perspectives of the racial climate regarding predominantly white college settings that White students do not experience. Allen (1992) found that "Black students often find it necessary to create their own social and cultural networks in order to remedy their

exclusion from the wider, White oriented university community" (p.29). For the most part, the environment at White colleges supports the development of White students (Harper, & Hurtado, 2007). Allen (1992) also suggested that students' academic performance will be affected by the quality of life, academic competition levels, institutional rules, resources, and race relations on campus with faculty and friends. The effects of discomfort are cumulative for students of color, often resulting in their failure to graduate (Hurtado, 1992, 1994; McIntosh, 1989). Research suggested that the inability to develop a connection with some aspect of the university will generally result in failure (Davis, et al., 2004).

Unlike African American students, most White students adjust well to the academic institution and have no complaints about alienation or unfairness in the classroom (Gossett et al., 1996). Even when White students are disenchanted with academics, it is for reasons that are less devastating to cognitive functioning. McIntosh (1989) discussed the advantages gained by those individuals who are White. "Many, perhaps most, of our white students in the U.S. think that racism doesn't affect them because they are not people of color. They do not see 'Whiteness' as a racial identity" (p.12). She suggested that these privileges are also entangled with social class, economic class, race, religion, gender and ethnic identity. White people do not see the relevance of their culture to diversity issues because the overall culture on campus continues to be designed for them (McIntosh). However, continued stereotyping and lack of interest in discrimination issues are found in the attitudes of many White students. Research by Rankin and Reason (2005) indicated that White students are better able to overlook or avoid negative behaviors and acts of discrimination. A majority of the White students in

the study viewed the institutional climate as more accepting than students of color, nonracist, friendly and respectful. In a study of White university students, Jackson (1995) found that many Anglo university students hold negative stereotypes and attitudes toward minority students, specifically toward African American and Hispanic students. Jackson also found that Anglo students perceived Hispanics as uneducated, and less intelligent and productive than Anglo individuals. In addition, Anglo-Americans associated less positive affect and more fear with African Americans than with Anglo-Americans.

There is often a significant failure on the part of the institution to provide an environment conducive to positive outcomes. At many PWIs, students of color find social interaction either uninteresting or inaccessible. By some estimates, 79% of non-African American students believed African American students have a place in which they feel "at home" on the campus, although only 60% of the African American students agree with that statement (Rankin & Reason, 2005).

Researchers have continued to demonstrate that the quality of life at the institution significantly influenced the persistence of African American students (DeSousa & Kuh, 1996; Guiffrida, 2004; Museus, 2008; Museus & Quaye, 2009). Quality of life includes students' perceptions of the university environment, perceptions of cultural fit within the environment (i.e., cultural congruity), and stress created by the environmental context (Gloria & Pope-Davis, 1997; Gloria & Robinson Kurpius, 1996). In the phenomenological study by Davis, et al., (2004) the initial question for each interview was: "Please describe what stands out to you about your college experiences here at University X" Five major themes were revealed from the interpretive analysis of the interviews:

1. "It happens every day": Unfairness/sabotage/condescension.

2. "You have to initiate the conversation": Isolation and Connection.

3. "They seem the same; I'm the one who's different."

4. "I have to prove I'm worthy to be here."

5. "Sometimes I'm not even here/sometimes I have to represent all Black students": Invisibility and super visibility.

The researchers summarized the experiences of the students they surveyed with the voice of one student:

> Unfairness, sabotage, and condescension are everyday occurrences in the White world in which I live at the university. In order to connect with students, faculty, administrators, and others on and around campus, I must be the one to initiate interaction, and I must also prove I am worthy as a student or friend. I am continuously made aware of how different I am, especially when I am the only Black student in a class. … Perhaps the most common experience I have is one of extremes: Either I am invisible or I am its opposite-- I am super visible. (p. 421)

Similar themes are discussed in studies by Suarez-Balcazar et al. (2003), Hogan and Mallott (2005), Cole (2007) and Fries-Britt and Turner (2001). Students often felt that their academic ability was not taken seriously and that isolation and perceived barriers played a role in their academic success.

Perceptions of Diversity

The college environment has a major influence on the outcomes of a student's personal and cognitive growth (Allen, 1992). An environment that emphasizes development of academic, scholarly and intellectual qualities is perhaps the most

influential factor in African American-minority student educational gains (Watson & Kuh, 1996). The American Colleges and Universities in 2000 reported that more than half of over 500 schools had instituted a multicultural curriculum requirement (Humphreys, 2000). The majority of the Universities required one diversity course and less than half required two or more. However it is not certain that because more people from different backgrounds are in classrooms their experiences will be educationally sound and result in desired outcomes. Research suggested multicultural courses can heighten awareness and promote a more open attitude toward social problems, but the benefits range from small to minimal and can diminish over time (Hogan & Mallott, 2005; Smith, Roberts, & Smith, 1997). In a study by Chang (2002), students who were nearly finished a multicultural course had lower prejudice scores on a modified version of the Modern Racism Scale than students who were just starting out. However, because these groups were assessed at different times in their academic careers it may have determined differences in-group results.

In a study of 432 undergraduate students, Miller, Anderson, Cannon, Perez and Moore (1998) found significant differences in perceptions of campus policies by racial identity. White students described the campus climate as positive. African American students rated the campus racial climate as more negative. African American and other students of color also felt the interactions on campus were less friendly and reported being the subject of racism. In a study by Rankin and Reason (2005) students of color still felt the campus environment was not welcoming and unreflective of their culture, while some White students felt there was too much attention to race. African American students were reported to be more likely than White students to be the target of some

form of direct, personal racism (Ancis, et al., 2000; Gossett, et al., 1996; Suarez-Balcazar et al., 2003).

These types of incidents included differential treatment and stereotyping by fellow students, faculty members, campus police, teaching assistants, administrators, and staff. In a study by McCormack (1998), it was found that incidents of discrimination in universities had increased, and that these acts of discrimination became more overtly expressed. African American and Hispanic students were more likely to experience these acts of discrimination than Asian students. Most often, researchers reported that African American students at PWIs confront a "chilly climate" (DeSousa & Kuh, 2000; Sedlacek, 1999) that is often matched with institutional services and programs that do not reflect their interests (Gossett, et al., (1996). Gossett et al. surveyed four large public universities in the Midwest. That study used The Perception on Community/Environment of Undergraduate Student in Higher Education (Cuyjet, 1994), an instrument that is specifically designed to assess students' perceptions of how they matter within the college environment, not how they feel about the school, but how the students feel the various components of the institution care about them. The study found considerable differences between the perceptions of African American students and their non-African American peers on issues of mattering and marginality. This type of adjustment to college is not only about adjusting to the new environment but also to new social and cultural contexts. Research indicated that students of color who have negative experiences adjusting at PWIs are less likely to persist (Cabrera, et al., 1999; Hurtado, 1992).

A perceived social connection or what is often termed "sense of belonging" is viewed as a key component of a students' academic and social integration on campus (Bollen & Hoyle, 1990). Various types of social and academic interactions on campus affect a students' sense of belonging. Hurtado and Carter (1997) indicated Latino students who interacted with peers around academic issues outside of the classroom had a higher overall sense of belonging. Research continues to indicate that students who have positive race related experiences on campus have a better sense of belonging (Lee & Davis, 2000; Mendoza-Denton, Downey, Purdie, Davis & Petrzak, 2002).

The struggles to identify the institutional conditions that promote and enhance students' experiences with diversity still exist. Are the benefits of diversity the same for all students at any college or university? Hu and Kuh (2003) found that students at private institutions had more diverse interactions, as well as students' at large institutions and liberal arts colleges than students at many other types of institutions. There is a continued belief that minority students will benefit from attending institutions where they are the majority, which may lessen the effects on attrition, disengagement, and feelings of discrimination. MacKay and Kuh (1994) challenged the belief that Black students attending predominantly White institutions are alienated and maladjusted and do not benefit from the college experience at levels comparable to White students. Their research found that different types of involvement contributed differentially to educational gains for Black and White students at colleges that provided unusually rich out-of-class learning experience, which Kuh (1991) called "involving colleges."

Watson and Kuh (1996) examined the relationships between student involvement in campus activities, perceptions of the institutional environment, and educational gains

of majority-and minority-race students at private liberal arts institutions. Watson and

Kuh (1996) proposed that Black-minority students at predominantly White liberal arts

institutions (PWLAIs) are more involved because when there are fewer minority students,

White students have to go out of their way to make Black students feel comfortable and

welcome. The study found that Black-minority students exhibited greater levels of

involvement in student activities; however, they did not benefit to the same degree as did

White students or Black-majority students. Black students may also have a clearer idea of

what they need to do to succeed and learn to deal with a possibly unwelcoming or hostile

campus environment.

Various researchers have found that Black students attending historically Black

colleges and universities are more engaged in campus life as compared to White majority

and Black minority students attending predominantly White institutions (Allen, 1992,

Fleming, 1984; Flowers, 2003; Flowers & Pascarella, 1999). It is assumed that in their

dominant-race environment students do not have to overcome obstacles to assimilation

that make it difficult to get involved in campus life. Watson and Kuh (1996) stated that

Black institutions provide African American students with a powerful educational

experience. In a multi-institutional study by Seifert, Drummond and Pascarella (2006)

across 15 states using data from the National Study of Student Learning (NSSL)

investigated the extent to which good practices prevailed at different institutional types.

The study results indicated students attending HBCUs experienced good practice

advantages in quality non-classroom interactions with faculty, faculty interest in teaching

and student development, instructor feedback, scholarly and intellectual emphasis and

interactions with other students in comparison to students attending PWIs. However, no

significant difference was found in the learning environment for students at HBCUs and liberal arts colleges. Possible explanation by the researchers suggested HBCUs tend to operate very similar to liberal arts colleges in their attempt to foster good practices. Minority students who are academically successful generally have a strong support person (Tracy & Sedlacek, 1989). Students at HBCUs are more likely to have someone of the same ethnicity, race or gender who can provide support and a sense of understanding (Nasim, Roberts, Harrell, & Young, 2005). Students at HBCUs are more engaged and challenged in their academic pursuits, and interacted more with their peers in and out of the classroom (Seifert, Drummond & Pascarella (2006).

In research studies by Hu and Kuh (2003) and Umbach and Kuh (2006), they concluded that students at -liberal arts colleges report more diversity experiences than their peers at other types of institutions even though liberal arts colleges enroll proportionately fewer students of color. The research is still not conclusive regarding African American student learning and institutional type (DeSousa & Kuh, 1996; Flowers, 2002, 2003). Pascarella and Terenzini (1991) stated that institutional type rarely affects student learning, but rather provides psychological climate support by the institution. Research by Seifert et al. (2006) indicated no difference in the learning environment fostered by faculty at HBCUs and liberal arts colleges. Often the HBCUs functioned like liberal arts colleges, fostering good practices for African American students. The study suggested that while HBCUs and liberal arts colleges may not share the exact same mission, institutions with a focused mission can provide undergraduate student of color a learning environment grounded in good practice.

Researchers have often also identified a "chilly climate," as the explanation for differences in levels of engagement and learning gains (Allen, 1987; DeSousa & Kuh, 2000; Sedlacek, 1999). In a study by Kim (2002) using the Cooperative Institutional Research Program (CIRP) used most often to assess how college affects students, analyzed a longitudinal student data set and found no significant difference in students attending HBCs and PWIs in overall academic, writing and math ability. Reasons for this may be explained by the supportive work HBCs are able to provide despite lack of resources and a greater number of students who enter with lower overall test scores. They are still able to produce the same results as the PWIs. It is possible that campus environments are also becoming somewhat more welcoming and are successfully encouraging Black students to become more involved in campus life. Irrespective of the racial composition of the institution attended, when African American students perceived a supportive and nondiscriminatory racial environment, it resulted in a statistically significant and positive impact on growth in openness to diversity (Flowers & Pascarella, 1999).

Researchers (Allen, 1987, 1992; Fleming, 1984) suggested Black students at HBCUs benefited more from their investment in college related activities than did Black and White students at PWIs. It is assumed that in their dominant-race environment students do not have to overcome obstacles to assimilation that make it difficult to get involved in campus life. Black students at Predominantly Black Liberal Arts Institutions (PBLAI) received a greater return. It is seen as disturbing that Black students who attend PWLAIs and put forth more effort than White students do in all areas report fewer gains than their classmates (Watson & Kuh, 1996). The study suggested that Black-minority

students exhibited greater levels of involvement in student activities; however, they did not benefit to the same degree as White students or Black-majority students. Other studies concluded that African American students attending HBCUs will exhibit greater levels of involvement and education gains than those that attend PWIs (DeSousa & Kuh, 1996; Fleming, 2001; Laird, Bridges, Holmes, Morelon, and Williams, 2004). Several studies historically report that Black students find the environment at PWIs to be more alienating than those of HBCs (Fleming, 1984; Gossett et al., 1996; Hummel & Steele, 1996, Hurtado, 1992; Smedley, et al., 1993). Hispanic students are less likely to complete a degree (Miller and Garcia, 2004) and often face challenges of first generation status, racism, and academic under preparedness (Dayton, Gonzales-Vasquez, Martinez & Plum, 2004; Ortiz, 2004). Research on Hispanic students at HSIs is varied indicating multiple support programs are offered however, the benefits are not clear (Dayton et al, 2004; Laden, 2004). Black students attending HBCUs typically evidence higher levels of persistence and degree attainment (Watson, & Kuh, 1996). In general HBCUs appeared to provide a more supportive environment for Black students, as compared with PWIs.

Faculty Involvement

Scholarly and intellectual experiences are perhaps the most influential factor in minority student educational gains. Some researchers have consistently suggested that faculty student interaction has a significant impact on student academic achievement and retention (Kuh & Hu, 2001, Tinto, 1993). Appel, Cartright, Smith and Wolf (1996) conclude that levels of faculty involvement were some of the most important, but most difficult, problems to address in diversity programming. Recent research examined the impact of student-faculty interaction on academic achievement for African Americans

and Hispanic students at PWIs (Anaya & Cole, 2001; Cole, 2007; Cole & Espinoza, 2008). More faculty contact may not increase students' academic gains (Cole & Jackson, 2005; Pike, 1991). Sedlacek (1995) suggested from studies conducted at Midwest institutions that most faculty members did not see a role for themselves on diversity issues, even in their classrooms. They regarded diversity as someone else's concern. Most institutions continue the use of monocultural rather than multicultural methods for engaging students in the classroom (Garcia and Smith, 1996). Many professors still expect students to assimilate to White cultural norms versus a more multicultural approach (Bennett, 2001).

Research by Pascarella and Terenzini (2005) revealed that faculty are the greatest socializing agents on campus. They are able to set the intellectual and behavioral norms and therefore may have the greatest impact on campus climate. According to Allen (1992) and Davis (1991), who conducted comprehensive analysis of minority students' collegiate experiences, lower academic performance among African American students was attributed, at least in part, to infrequent faculty contact. In a study by Hernandez (2000) frequency and quality of contact with faculty improved retention among Latino students. However, in a study by Lundberg and Schreiner (2004) consisting of 4,501 undergraduates from various institutions indicated that increasing interaction is not enough for students of color; the focus must be on the quality of faculty-student interactions. This research supported similar findings by Mayo, Murguia, and Padilla (1995) in a study of over 1,200 students; they found that for Black students, frequency of out of class contact with faculty had a positive correlation with GPA. However, the students did not find these interactions as rewarding as White, Hispanics and Native

American students.   The quality of interactions was a better predictor of learning for students of color and especially for African Americans.

For many minority students who lack significant faculty contact, race was often considered a determining factor (Kraft, 1991). Anaya and Cole (2001), who have one of the few studies specifically examining the effects of faculty interactions on minority students' educational gains, concluded that the quality and nature of faculty relationships was significantly related to Latinos' undergraduate grades. In turn, these minority students felt that faculty were less willing to interact with them, even concerning academic issues (Allen, 1992). As a result, minority students, particularly those who experienced or perceived their college environment as racially or ethnically insensitive, were more likely to have fewer student-faculty contacts and academic development subsequently suffered (Allen, 1992; Nora & Cabrera, 1996).

Student experiences prior to college with different racial ethnic groups may influence their college interactions (Saenz, Ngai, & Hurtado, 2007). Many Hispanic and Black students are educated in increasingly segregated K-12 environments (Orfield & Lee, 2006). Many are accustomed to schools where they comprise the majority. While integration has been a significant force in the nation's school systems since the 1970s, more than 70% of Black students went to schools with more than 50% minority enrollment, and 36.5% of these students went to schools with a minority enrollment of 90-100% (Bjerklie, 2001). With students of color entering colleges from a variety of different backgrounds, socioeconomic levels and cultural backgrounds, the predisposition to racial groups where they feel most comfortable will often determine their courses, peers, activities and interactions (Saenz, 2005).

Research indicated that Black students often experience difficulty connecting with White faculty for various reasons (Feagin, Vera, & Imani, 1996; Steele, 1997). White faculty are often perceived as culturally insensitive and unapproachable (Feagin et al, 1996) and students felt upset when faculty asked them to represent their entire race by giving their perspective on issues (Fries-Britt & Turner, 2002). Additionally, students may not perceive White faculty as realistic role models (Tinto, 1993). According to Berry (1983) Black students find themselves isolated in many classrooms. They are generally excluded from the informal repartee among White students, and complain of being ignored by professors when students are called on in class. African American students often felt faculty stereotyped them as less capable than their White peers (Fries-Britt & Turner, 2002). McCormack (1995) found that 31% of minority students reported verbal harassment by other students, and 8% of the subjects cited the use of racial stereotypes and unfair grading by faculty. African American students have reported that faculty members often assess their academic performance more negatively than they do for Caucasian students (Ancis, et al., 2000).

It has been reported that many presumed that the lack of ability and lack of preparation from White faculty impedes communication with Black students (Milem, 1994). Faculty who promote negative stereotypes in the classroom toward minority students, whether consciously or not, cause minority students to become acutely uncomfortable, mistrustful, or demoralized. According to research by McCormack (1998), the tendency for faculty to exhibit discriminative behavior showed a considerable increase from 1988 to 1992. McCormack compared the number of incidents and types of discrimination, showing a shift from subtle forms to more blatant acts of discrimination.

These findings put minority students in a disadvantageous position, since the interaction between students and faculty is a fundamental component of students' academic success. In a follow-up study McCormack (1998) found that discrimination at these institutions had increased and the acts of discrimination were more overt.

Faculty diversity is also crucial. The presence of women and people of color in the faculty has been shown to directly and indirectly shape the climate of the institution. According to Milem (2005) women and faculty of color are more likely to use student-centered approaches and active learning methods in the classroom, to include the perspectives of racial and ethnic minorities in the curriculum, and to be more actively engaged in conducting research on issues of race and gender. Research by Guiffrida (2005) also indicated that African American students' perceived African American faculty were preferred over White faculty because they fit their definition of student-centeredness. A more holistic approach for faculty who provide advising for students of color is recommended for those working at PWIs (Guiffrida, 2005).

Summary

Many have suggested that a diverse student body creates a unique learning environment that will have positive outcomes for student learning; challenging students to refine their thinking, and enriching the dialogue between students (Antonio, 2001; Chang, 1999; Hurtado, 1999). It is believed that these diverse interactions will define students who have made measurable gains in critical and active thinking (Gurin, 1999; Pascarella et al., 1996; Terenzini et al., 2001) and better retention rates and degree aspirations (Chang, 1999; Gurin, 1999). Overall, there is research to suggest that interactional diversity experiences positively influence overall satisfaction with the

perception of the campus climate (Chang, 1999, 2001; Milem & Hakuta, 2000).

Numerous studies indicated that improving the structural diversity of the campus would

then exert an indirect effect on student learning, through the interaction with peers

(Chang, 2001; Gurin, 1999; Hurtado et al., 1998, 1999; Light, 2001; Lou & Jamieson-

Drake, 2009). However, sufficient numbers of minority students must be present on

campus before interracial interaction can occur. Lou and Jamieson-Drake (2009) found

that with a more diverse student body, students would have the opportunity to be exposed

to a variety of perspectives different from their own inside and outside the classroom.

These informal interactions with diverse peers would have a variety of effects on students

from personal development, to positive perceptions of the campus environment (Antonio,

2001; Chang, 1999; Hu & Kuh, 2003; Umbach & Kuh, 2005). The greater the numbers of

students of color, the opportunities to create a better climate and enhance learning

environment are increased. However, the climate of the institution is more than just

numbers of students of color. It involves the presence of individuals across the campus

from many different backgrounds. The climate is also set by the experience and

interaction of the individual and groups on a campus (Chang, 2001; Milem et al., 2005).

Research suggests when structural diversity, classroom diversity and interactional

diversity are present; a rich and challenging college education is possible (Chang et al.,

2004; Gurin et al., 2002; Saenz et al., 2007; Lou & Jamieson-Drake, 2009).

However, research continues to suggest that the experiences of students of color

at PWIs are often significantly different than their White peers (Pascarella & Terenzini,

1991; Smith et al., 1986). They will often experience alienation and unequal treatment

(Allen, 1992; Helm, Sedlacek & Prieto, 1998; Love, 1993; McCormack, 1995). The

belief that just changing the structural diversity of the student body will lead to positive outcomes is not a shared belief (Gossett, et al., 1996; McCormack, 1995, Milem et al., 2005; Wood & Sherman, 2001). Research by Rothman, Lipset, and Nevitte (2003) warned that diversity initiatives have the potential to lower ratings of educational quality and create greater racial tension among students. DeSousa, (1991) also suggested that interactions among diverse groups could also lead to a less affirming campus environment. It is also apparent that the U.S. Supreme courts have differing opinions about the educational benefits of diversity (Chang et al., 2004). Still there is the belief that increased structural diversity may not lead to diversity of thought (Wood & Sherman, 2001). Simply bringing students of color to campus will not necessarily improve the campus racial climate or enhance learning opportunities (Bowen & Bok, 1998; Hurtado et al., 1999). Negative perceptions of the campus climate may affect academic integration, institutional commitment and academic achievement (Cabrera et al., 1999).

Additionally, the relationships between compositional diversity, informal interactional diversity, and perceived campus climate are often complicated by the type of institution students attend. Research by Umbach and Kuh (2005) suggested that liberal arts colleges may have more experience with and greater gains in diversity than students who attended larger and often more diverse institutions. However, Pike and Kuh (2005) determined that it was not possible to conclude whether the negative perceptions of the campus climate were a direct result of interacting with diverse groups of students or attributed to institutional characteristics such as size and mission or some other complex interaction.

It becomes important in this study to understand the relationships between compositional diversity and the campus environment as mediated by informal interactional diversity. The research by Pike and Kuh (2005) and Umbach and Kuh (2005) suggested that institutional characteristics are an important element in perception of the campus climate. The development of racial climate theories by Hurtado, Milem, Clayton-Pedersen and Allen (1999) along with work by Milem, Chang and Antonio (2005) helped to guide this study in our understanding of how race and ethnicity may lead to students' experiences of engagement across campus or impede their interactions. Additionally, this study focused on peer liberal arts colleges and universities with perceived similar characteristics, goals, and missions.

CHAPTER III - RESEARCH METHODS

Research methods used in this study to examine the perceptions of the campus racial climate by institutional type and other student characteristics are presented in this chapter. Additionally, this study determined if interactional diversity can be predicted by several variables. This chapter begins with the hypotheses and then the design of the study, and discussion of the data source used for the research. A description of the instrument is explained, followed by procedures for the analysis. Lastly, the chapter provides a description of the statistical procedures utilized to answer the research questions.

Hypotheses

The purpose of this study was to determine if perceptions of campus climate differ by institutional type and dimensions of student characteristics of race, year of study, and gender. Further, the purpose of the study was to determine if informal interactional diversity, such as conversations with students of different races or contact and experiences with other students, can be predicted by student characteristics, institutional type (e.g., private or public, liberal arts), and aspects of the environment such as compositional diversity, and student perceptions of campus climate. The research hypotheses are:

H (1): There is no significant difference in perception of the campus climate between freshman and seniors, by institutional type, or by gender, or by race.

H (2): The variance in interactional diversity will be significantly predicted by student characteristics, institutional factors, compositional diversity, and student perceptions of a supportive campus racial climate.

Design of the Study and Data Source

This study used data from the 2005 National Survey of Student Engagement (NSSE). The NSSE is an annual survey of first-year and senior students at colleges and universities across the country. It measures the degree of student participation in educational practices that prior research suggests is linked to valued outcomes of attending college (Kuh, 2001). The NSSE is administered during the spring academic term. NSSE uses a cross-sectional design. Students randomly selected to complete the survey are first-year students and seniors who were enrolled the previous term. Students who complete the survey are considered to have had enough experience with the institution to render informed judgments. Institutions have the option of responding either to a paper-and-pencil questionnaire or by computer. Each university can select the method of administration prior to the survey. The institution provided NSSE with a student data file and NSSE contacts the students. NSSE selected a random sample (½ first year and ½ seniors) of students from the student population data file based upon undergraduate enrollment. In February to March, selected students receive either a personalized letter, a copy of the National Survey of Student Engagement (NSSE) and postage-paid reply envelope, or a mailed announcement followed by an electronic invitation to complete the Web version of the NSSE**.** Surveys are typically completed in15 minutes or less and are submitted directly to NSSE.

The breadth of items included in the survey provides a way to meaningfully explore differences in student engagement across various student groups and institution types (Laird, Bridges, Morelon-Quainoo, Williams & Salina Holmes, 2007). The NSSE asked students about their experiences in four areas:

1. The amount of time and effort devoted to in-class and out of class activities;

2. Participation in enriching educational activities;

3. Gains in personal and educational development, and

4. Perceptions of the college environment including overall satisfaction and the quality of academic advising.

In addition, the NSSE asks students to report the frequency of their participation in activities on campus as well as their perceptions of the college environment associated with achievement and satisfaction. Lastly, students provide information about their background, age, gender, race, living situation, educational status, and major.

The survey is dependent on student self-reports, the accuracy of which can be affected by two general problems. The first problem is related to the inability of respondents to provide accurate information in response to a question (Wentland & Smith, 1993). The second problem follows from a respondent's unwillingness to provide what they know to be truthful information (Aaker, Kumar, & Day, 1998). Research suggests that self reports can be valid if (1) the information is known to the respondents, (2) the questions are clear and unambiguous, (3) the questions are focused on recent activities, (4) the questions merit a serious response, and (5) if answering the questions will not provoke embarrassment, or a violation of privacy (Kuh et al., 2001; Pace 1985; Pike, 1995).

The validity of self-reported time use has also been examined (Gershuny & Robinson, 1988). Estimates of time usage tend to be less accurate than diary entries. However, this threat to validity can be improved by asking respondents about relatively recent activities (six months or less), providing a frame of reference or landmark to use, such as the period of time to be considered (Converse & Presser, 1989). Student self-reports are also subject to the halo effect -- the possibility that students may slightly inflate certain aspects of their behavior or performance, such as grades, the amount that they gain from attending college, and the level of effort they put forth in certain activities. To the extent that the *halo effect* exists, it appears to be relatively constant across different types of students and schools (Pike, 1999). This means that while the absolute value of what students report may differ somewhat from what they actually do, the effect is consistent across schools and students. Consequently, the halo effect does not appear to advantage or disadvantage one institution or student group compared with another.

The NSSE survey also used benchmarks, which are 42 key questions that capture vital aspects of the student experience: level of academic challenge, active and collaborative learning, student faculty interaction, supportive campus environment, and enriching educational experiences. The groups of items that go into the construction of the benchmarks are the product of a blend of theory and empirical analysis. Only randomly sampled cases are included in the calculation of institutional benchmarks (Kuh, 2001). The process for calculating benchmark scores was revised in 2004 to make these scores easier to understand and to allow institutions to calculate their own scores and run intra-institutional comparisons. Student-level benchmark scores were derived from an individual student's responses to the survey items related to a particular benchmark after

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the scores have all been placed on a 100-point scale. The weighted mean of these student scores is the benchmark score for an institution. Student-level comparisons are taken versus institutional level scores to lessen the between school variance. NSSE (2004) reports the largest difference in student engagement happens inside a selected institution, not between institutions.

Sample

Data for the analysis of the research questions in this study were drawn from 1,698 students who responded to the 2005 NSSE survey and whose institutions fit the specified categories in 2005. The sample was composed of undergraduate first-year and senior students from four-year Baccalaureate colleges and universities in the Liberal Arts.

For the purpose of this study the Carnegie classification scheme (McCormick, 2001) was used to identify institutions. Carnegie defines Liberal Arts as institutions that are primarily undergraduate colleges with a focus on baccalaureate programs who during the time of the study awarded at least half of their degrees in liberal arts fields. Data regarding institutional characteristics and diversity of the student population come from the fall 2005 National Center for Education Statistics' Integrated Postsecondary Education Data System (IPEDS).

Specifically, institutions that fit the category of Council of Public Liberal Arts Colleges (COPLAC) institutions were studied. COPLAC was established to promote the liberal arts education of superior quality in the public sector. Institutions pay a membership fee and agree to specific guidelines to benefit from the designation of COPLAC. Eight institutions in the study were identified as COPLAC members.

Secondly, peer institutions are designated by the State Council of Higher Education for Virginia (SCHEV) as those institutions throughout the nation that are most similar to specific institutions in the Commonwealth of Virginia. The selection of peer institutions was based on designated peer institutions of the University of Mary Washington, which is a liberal arts institution as defined by the Carnegie classification and a COPLAC institution. Twelve institutions were identified as peer institutions that participated in the 2005 NSSE. This sample used two groups of institutions: COPLAC and Virginia peer institutions totaling 20 (Appendix A). There are no institutions that overlap for this study.

Measures

The NSSE instrument was reviewed (1998, 1999) so that the items on the survey were clearly worded, well defined, and had high face and content validity. Logical relationships existed between the items in ways that are consistent with the results of objective measures and with other research (Kuh, 2001). The instrument has been found to be reliable; the items have consistently measured the same constructs across respondents and institutional settings. To measure the strength of the survey, scores from several national administrations of the NSSE since 2000 were conducted. Institutional characteristics were fully controlled and Rho values ranged from .74 to .90 for three years. Rho values are used to calculate the strength of the relationship between two continuous variables. This would suggest NSSE scores are stable over time.

There are several variables in this study. Newly created scales for supportive racial climate and informal interactional diversity were designed to include questions that

were not included in other studies using the NSSE. These scales are presented. It was felt these additional questions defined the categories with more depth. This section identifies the variables and the measures for those variables. A factor analysis for each of the newly created scales (supportive racial campus climate and informal interactional diversity) was performed. Factor analysis is a statistical approach that can be used to analyze interrelationships among a large number of variables and to explain these variables in terms of a shared variance of their common underlying dimensions or factors (Hair, 1992). With this analysis, factors are estimated using a shared variance analysis (Tabachnick & Fidell, 2001).

Institutional size is also used as a variable in the research. Institutional size was set up in 4 categorical groups, 1) very small: 1,900 or fewer students, 2) small: 1,900-2,350 students   3) mid-size: 2,350-3,000 students and 4) large: more than 3,000. Categories for institutional size were determined by IPEDS data provided from NSSE.

The variable location of the institution was previously defined by NSSE. Any institution located in a large city, or on the fringe of a large city was termed urban. Suburban institutions were those situated in small towns or rural areas.

Dependent and Independent Variable: Supportive Racial Campus Climate

The measure of supportive racial campus climate was used as both a dependent and independent variable in this study depending on the hypothesis being tested. Supportive campus racial climate used five items from the NSSE supportive campus environment scale derived from the 2005 benchmark. This scale was used to measure a students' perception of the institution's emphasis on student success and the emphasis the

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institution places on encouraging contact among students from different economic, social, and racial backgrounds. Three additional questions from the 2005 NSSE survey were considered relevant to determining campus climate and were also included in this measure of supportive racial campus climate. The relationships to other students, faculty and administrators were deemed to be important in determining the racial climate of the campus. The measure was therefore comprised of these eight NSSE survey items:

1. To what extent does your institution emphasize providing the support you need to help you succeed academically?

2. To what extent does your institution emphasize helping you cope with non-academic responsibilities (work, family, etc.)?

3. To what extent does your institution emphasize providing the support you need to thrive socially?

4. To what extent does your institution emphasize encouraging contact among students from different economic, social, and racial or ethnic backgrounds?

5. To what extent does your institution emphasize attending campus events and activities (special speakers, cultural performances, athletic events, etc.)?

6. What is the quality of your relationships with other students?

7. What is the quality of your relationship with faculty members?

8. What is the quality of your relationship with administrative personnel and offices?

Response options for questions 1-5 above were on a four choice response option ranging from "very much," "quite a bit," "some," and "very little." Items with four response options were recoded with values of 100, 66.67, 33.33, or 0. Using Indiana University

Center for Postsecondary Research (2004) calculated benchmark scores for the NSSE

Supportive Climate questions and the group mean generalizability coefficient for 50 or

more students at .70. Composite scale for NSSE's supportive campus climate was found

to be reliable for seniors .79 and .79 for first year students (Umbach & Kuh, 2003).

Response options for questions 6-8 noted above were on a seven-point semantic-

differential scale. Response values for questions 6-8 are demonstrated in Table 3.1.

Because response values for questions 1-5 are scaled differently than those for questions

6-8, z scores will be calculated for all eight response values so that responses can be

viewed in the context of standard deviations.

Table 3.1: Response Values for Relationships

Question	Item #	Variable	Response values
6	8a	Quality of relationship with students	Friendly, supportive, sense of belonging = 7 Unfriendly, Unsupportive, Sense of alienation= 1
7	8b	Relationships with faculty	Available, helpful, sympathetic= 7 Unavailable, unhelpful, unsympathetic =1
8	8c	Relationships with administrative personnel and offices	Helpful, considerate, flexible=7 Unhelpful, inconsiderate, rigid=1

Reliabilities were calculated for the scale used in this study as well. The scale has good

internal consistency with a Chronbach alpha coefficient of .79. The mean for the items

was 3.67 and the mean for the scale was 29.39 (SD= 5.14), with a variance of 26.41.

Factor analysis demonstrated a total variance of 2.64 among the selected items.

The 8 items used to develop Supportive Racial Climate were subjected

to factor analysis. Review of the correlation matrix revealed many coefficients' of .3 and

above. Kaiser-Meyer-Oklin Measure value was .810, exceeding recommended value of .6. Bartlett's test of Sphericity was significant, supporting the factorability of the correlation matrix. Component analysis revealed 2 values exceeding 1 explaining 54.14% of the variance. Two components were selected for further investigation. A Varimax rotation was performed on the two components. Both items revealed strong loadings, with all variables loading substantially on only one component. Variance for both components were the again at 54.14%, which was consistent with previous analysis. The results support the use of the designed scale (Table 3.2).

Dependent Variable: Interactional Diversity

The measure of informal interactional diversity was comprised of four questions from the 2005 NSSE survey:

1. How often have you had serious conversations with students of a different race or ethnicity than your own?

2. How often have you had serious conversations with students with religious beliefs, political opinions, or personal values very different from yours?

3. To what extent does your institution emphasize encouraging contact among students from different economic, social, and racial or ethnic backgrounds?

4. To what extent has your experience at this institution contributed to your knowledge, skill, and personal development in understanding people of other racial and ethnic backgrounds?

Response options for the first two questions were "very often," "often," "sometimes," and "never." Response options for the final question were "very much," "quite a bit," "some," and "very little." Items with four response options were also recoded with values

of 100, 66.67, 33.33, or 0. Responses were recoded for statistical calculations. Reliability

scores for the composite scale for interactional diversity have an internal consistency with

a Chronbach alpha coefficient of .68. Means for these items were 10.56 (SD=2.72), with

a variance of 7.41. The 4 items of the interactional diversity scale were subjected to

factor analysis (Table 3.2). Review of the correlation matrix revealed all of the

coefficients were above .3. The Kaiser-Meyer-Olkin Measure value was .606 measuring

at the recommended level of .6. Commonalities of the items all loaded between .74 and

.79. Variances for components explain an overall variance of 76.86%. Factor analysis

demonstrated a total variance of .568.

Table 3.2: Supportive Racial Climate and Interactional Diversity Factor Analysis

Supportive Racial Climate

		Eigenvalues		Sums of Squares	
Component	Total	Initial % of Variance	% of Variance	Cumulative %	
1	3.28	41.09%	41.09%	41.09%
2	1.04	13.04	13.04%	54.14%
3	.811	10.14		
4	.728	9.10		
5	.677	8.46		
6	.625	7.80		
7	.484	6.05		
8	.343	4.28		

Sums of Squared Loadings

Component	Total	% of Variance	Cumulative%
1	2.45	30.64	30.64
2	1.88	23.50	54.14

Interactional Diversity

		Eigenvalues		Sums of Squares	
Component	Total	Initial % of Variance	% of Variance	Cumulative %	
1	2.03	50.79%	50.79%	50.79%
2	1.04	26.71%	12.61%	76.86%
3	.50	12.61%		
4	.42	10.52%		

Independent Variable: Compositional Diversity

Data from IPEDS 2004 was used to calculate compositional diversity. The race/ethnicity percentages came from NSSE based on compiled 2004 IPEDS data. These data were provided as percentages by racial group. Individual institutional totals for compositional diversity were not provided and school identities could not be provided, therefore not allowing separate entry of researched IPEDS data.

Independent Variables: Demographic Characteristics

Gender was assigned as male or female. Class standing was freshmen or senior. Race was categorized as Black or African American, American Indian, Asian American or Pacific Islander, White (non Hispanic), and Hispanic (including Mexican, Mexican American, Latino, or Puerto Rican). Due to the small n, groups were aggregated in the ANOVA as students of color (non-White). Only racial categories with sufficient numbers were used in the analysis.

<center>*Procedures*</center>

This study examined an existing NSSE data set gathered in 2005. There were 31 institutions selected, that matched the criteria of COPLAC or peer institution from this set. From the 31 institutions, 20 were used in the study; other institutions did not participate in the 2005 NSSE survey. Eight of the institutions were identified as COPLAC. Lastly, 12 of the 31 were peer institutions defined by the State Council of Higher Education Virginia (SCHEV) participated in the NSSE survey and are determined to be peer institutions to the University of Mary Washington.

The numbers of students sampled at each institution depended on the total undergraduate enrollment of the institution, and an equal number of first-year students and seniors are sampled. The 2005 web-only mode response rate (42%) exceeded that of the paper administration mode (35%). Data sets for selected institutions were supplied by NSSE.

Data Analysis

The study used several methods to answer the proposed research questions. Hypotheses I was tested using a 4-way ANOVA. Hypothesis II used a hierarchical multiple regression. The level of significance is set at $p < .05$. Tests of multicollinearity among the independent variables indicate that there are no violations of the assumption of regression analysis. The lowest Tolerance level was .871 and the highest VIF level was 1.148. The ratings between these variables were above zero for tolerance and below 10 for VIF (Tabachnick & Fidell, 2001). These ratings indicate that there is no violation of multicollinearity among the independent variables in the conceptual framework.

Hypothesis I

The difference in the perception of the campus racial climate between first-year students and seniors, by institutional type, by gender, and race were analyzed using a 4-way ANOVA. This analysis is used when there are two or more fixed-effect factors. Usually the aim is to see whether these interactions or the main effect is significant. A Tukey post hoc test was conducted on race to determine significant differences.

Hypothesis 2

      The variance in interactional diversity was significantly predicted by student characteristics, institutional factors, class standing, and campus climate. Hierarchical multiple regression was used entering one block into the equation at a time. Multiple regression analysis is an appropriate method when looking for predictive relationships between several independent variables and a dependent variable (Lewis-Beck, 1980). Establishing the order in which the variables are entered is critical to regression analysis. The last independent variables entered should have the most direct relationship to the dependent variable. Independent variables that are more distal to the dependent variable will be entered first, followed by variables that are more proximal to the dependent variable. Block 1 includes race and gender, and Block 2 accounts for type of institution, location of institution, size of institution, and compositional diversity. Block 3 is class standing and block 4 enters the supportive racial campus climate scale.

Table 3.3: NSSE Items Used to Measure Variables

Block	Measure	Item	Response Choices	Variable Type

Block 1
Race/
Ethnicity
	category	**18. What is your racial or ethnic identification?**
		(Mark only one)
			• American Indian or other (1)
			• Asian American or Pacific Islander (1)
			• Black or African American (1)
			• White (non-Hispanic)(0)
			• Hispanic (Mexican or Mexican American
			     Puerto Rican
			     or Latino) (1)
				Personal Characteristics

Gender	category	**16. What is your gender?**	• Male (0) • Female (1)	Personal Characteristics
Block 2 Type of Institution	category	Reported by institution	• COPLAC (1) • Peer (0)	Institutional Characteristics
Location of Institution	category	Reported by IPEDS	• Urban (0) Large city, mid-size or urban Fringe of large city • Suburban (1) Small town or rural	Institutional Characteristics
Size of Institution	category	Reported by IPEDS	• 1,900 or fewer(1) • 1,900-2,340 (2) • 2,350-3,500 (3)	Institutional Characteristics

Block	Measure	Item	Response Choices	Variable Type
Compositional Diversity			• More than 3,000 (4) IPEDS: %African American IPEDS:% Native American IPEDS:% Asian American IPEDS:% Hispanic	Institutional Characteristics
Block 3 Class standing	category	**19. What is your current classification in college?**	• Freshman/first year (0) • Senior (1)	Compositional Diversity
Block 4 Supportive Racial Climate scale	scale	NSSE items as a scale	• Conversations with students of different races • Serious conversations with students with values different than your own • Institutional emphasis encouraging contact with students from different backgrounds. • Experience at the institution contributing to development and understanding of people different from yourself.	

Summary

This chapter detailed the methodology of this study to investigate the diversity experiences of students at liberal arts colleges and the nature of those experiences. The purposes, hypotheses, general framework of the design, are included. Also included were the variables, and statistical procedures for analyzing each variable. Lastly, the proposed data analyses for each hypothesis as well as the possible limitations of the study were discussed.

CHAPTER IV – FINDINGS

This chapter presents results of the statistical analysis performed on the data from the 2005 National Survey of Student Engagement (NSSE) and 2004 IPEDS data. Specifically, data collected from 20 colleges and universities that are identified as either Peer Institutions in Virginia or COPLAC institutions were analyzed. The purpose of this study was to examine the relationships of compositional diversity, informal interactional diversity and student perception of the campus racial climate at specified public liberal arts institutions. First, sample characteristics and demographic characteristics are discussed. Second, hypotheses' testing is examined.

Sample Characteristics

The sample selected was from the 2005 NSSE data set of student respondents. Within the data set, 20 institutions were identified as members of COPLAC and peer institutions to a selected public Virginia University. From this data 1,698 students were sampled for this study. Borg and Gall (1989) indicate that 10 to 15 cases should be present for each variable involved in multivariate statistics. Each demographic variable was checked prior to analyses in order to ensure that this minimum was met. All variables met the criterion with the exception of students who identified as American Indian or Native American and Puerto Rican. Only 160 students identified a race/ethnicity of the 1,680 who responded other than White. Since the number of students of color was very small in comparison to the number of white students, understanding the group as a whole

was preferred. Forty-one students preferred not to respond to and 7 selected other. Due to listwise deletion, some analyses represent a fewer number of total cases.

Demographic Characteristics

Of the students in this study, 66.3% (n=1,126) were female and 33.7% (n=572) were male. When examining race and ethnicity institutional reports stated, 84% (n=1426) were White; .6% (n=10) were American Indian or Native American; 3.1% (n=52) were Asian American; 3% (n=51) were Black or African American; 2.8% (n=47) were Hispanic or Latino; 2.1% (n= 36) were foreign; and 2.4% (n=41) were unknown and .4% (n=7) were other.

For student classification, 49% (n=790) were freshman or first year; 2.9% (n=46) were sophomore; 1% (n=16) were juniors; 45.5% (n=722) were seniors; and 6.5% (n=111) were missing cases. Only first year students and seniors are used in this study. Those institutions designated as COPLAC had 28.3% (n=480) students participating in the survey; and 71.1% (n=1,218) were students at peer institutions. (See Table 4.1) Of the students participating in the survey, demographic data related to institutional type are represented in Table 4.1. Total respondents for race were 480 at COPLAC institutions and 1,200 for Peer Institutions. A smaller proportion of Asian American 2.8% (n=33) and African American 2.6% (n=31) students attended Peer Institutions when compared with those attending COPLAC institutions, Asian Americans 4% (n=19) and African Americans 4.2% (n=20). White students were the overwhelming majority at both types of institutions.

Table 4.1: Demographic Characteristics of Respondents

Respondent Characteristics (N=1,698)	N	Percent	N	COPLAC	N	Peer
Race						
American Indian or Native American	10	.6%	2	.4%	8	.7%
Asian American or Pacific Islander	52	3.1%	19	4%	33	2.8%
Black or African American	51	3.0%	20	4.2%	31	2.6%
Hispanic or Latino	47	2.8%	14	2.9%	33	2.8%
Multiracial	15	.6%	5	1.0%	10	.8%
White	1,426	84.0%	398	82.9%	1,028	84.4%
Unknown	41	2.4%	14	2.9%	27	2.2%
Gender						
Male	572	33.7%	147	30.6%	425	34.9%
Female	1,126	66.3%	333	69.4%	793	65.1%
Class Standing						
Freshman (1st year)	790	49.8%	208	43.3%	582	47.8%
Sophomore	46	2.9%	34	7.1%	12	1.1%
Junior	16	1.0%	12	2.5%	4	.4%
Senior	722	45.5%	190	39.6%	532	43.7%
Unclassified	13	.8%	8	1.7%	5	.4%
Missing	111	6.5%	28	5.8%	83	6.8%

The header spanning "Institutional Type percent" covers the N / COPLAC / N / Peer columns.

Dependent /Independent Variables

Initially, dependent and independent variables were created using selected items from the survey. Both scales were subjected to factor analysis to determine reliability. Factor analysis supports the use of designed scales. See Chapter Three for the development of those scales.

Hypothesis One

Perception of the Supportive Campus Racial Climate

The first hypothesis stated: there is no significant difference in perception of the campus racial climate between a freshman and senior, COPLAC and peer institutions, or by gender or race. The analysis for the first hypothesis used a four-way analysis of variance (ANOVA) to evaluate the differences in the perception of a supportive campus racial climate against several independent variables: class standing, institutional type, gender, and race. The analysis evaluated the supportive racial climate scale as the dependent variable along with the independent variables of class rank (freshman and senior), gender (male and female) along with perception by race (White and students of color) and institutional type (COPLAC and Peer). This method allows for understanding possible individual and group effects of the independent variable against the dependent variable. This analysis tests for main effects of each variable and the possibility of an interaction effect. In the four-way analysis, variables were entered into the equation to determine interaction. Levene's test of equality of error variance had a significance level

of .053 indicating that there is equal variance across the groups. Therefore, the assumption of homogeneity of variance was not violated.

Gender and race did not have a significant effect on students' perception of a supportive racial climate. Results for gender were $F (1, 1421) = 1.299$, p=.255 and for race were $F (1, 1421) = .180$, p=.671. Interaction effects of race and gender were not significant $F (1, 1421) = .001$, p=.975. In addition, institutional type and class rank did not have significant main effects: institutional type $F (1, 1421) = 2.743$, p=.098; and class rank $F (1, 1421) = 3.180$, p= .075. Although the results are not significant for race and class rank it is interesting to note that mean scores for class standing indicate that freshman male of color at peer institutions (M= 30.15, SD=5.10) and female students of color (M= 30.37, SD= 5.75) have better perceptions of the supportive racial climate than senior males (M= 26.92, SD=5.80) and senior females of color (M=29.30, SD= 4.36). At COPLAC institutions, freshman males of color generate the lowest scores related to a supportive racial climate (M=26.61, SD=5.53). Seniors at COPLAC institutions scored lowest on supportive racial climate scale. Interaction between institutional type and class standing produced small significant results. Freshman at peer institutions indicated higher scores on supportive racial climate (M= 30.46, SD=5.03) while at COPLAC institutions the highest scores were seniors (M=28.69, SD=4.92). (Table 4.4) Initial interaction scores revealed results of $F (1, 1421) = 6.381$, p= .012. The interaction of class standing and institutional type was $F (1, 1421) = 5.809$, p = .016. The main effects for this analysis were institutional type $F (1, 1421) = 14.252$, p=.000; gender $F (1, 1421) = 7.269$, p= .007 and class standing $F (1, 1421) = 6.237$, p= .013 (Table 4.2, 4.3).

Table 4.2: Analysis of Variance (4 way) Supportive Racial Climate Between Subject Effects

Supportive Racial Climate Dependent Variable	Mean Square	F	Sig.
Type	70.298	2.743	.098
Gender	33.298	1.299	.255
Race	4.623	.180	.671
Class Standing	81.521	3.180	.075
Type*Gender	61.371	2.394	.122
Type*Race	3.031	.118	.731
Type*Class Standing	163.544	6.381	.012*
Gender*Race	.025	.001	.975
Gender*Class Standing	1.351	.053	.818
Race*Class rank	1.487	.058	.810

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

Table 4.3: Analysis of Variance (4 way) Supportive Racial Climate Adjusted for Significant Interaction

Dependent Supportive Racial Climate	Mean Square	F	Sig.
Independent Variable			
Type	364.543	14.252	.000***
Gender	185.930	7.269	.007**
Class Standing	159.523	6.237	.013*
Type*Class Standing	148.586	5.809	.016*

R squared= .029 (Adjusted R Square = .026)

Table 4.4: Summary of Descriptive Means for 4 way Analysis

Dependent Variable Supportive Racial Climate

		Peer Institution			COPLAC		
		N	Mean	SD	N	Mean	SD
Male							
(SOC)	Freshman	20	30.15	5.10	13	26.61	5.53
	Senior	13	26.92	5.80	8	32.00	6.59
(White)	Freshman	171	30.02	5.38	59	30.69	4.97
	Senior	156	28.16	5.57	35	26.80	4.38
Female							
(SOC)	Freshman	45	30.37	5.75	13	30.69	6.36
	Senior	33	29.30	4.36	15	26.80	5.28
White	Freshman	299	30.75	5.75	134	28.70	5.50
	Senior	297	29.52	4.61	126	28.64	4.85
Total	Freshman	535	30.46	5.03	219	28.64	5.43
	Senior	499	29.01	4.98	184	28.69	4.92

Hypothesis Two

Interactional Student Diversity

   The second hypothesis states that the variance in interactional diversity will be predicted by student characteristics such as race and gender; institutional factors which include institution location, student enrollment, type of institution, and compositional diversity; as well as class rank and student perceptions of a supportive racial climate. The hierarchal regression model was used to include variables that show how much variance of the dependent variable was actually explained by the independent variables (Licht, 1995). For this study, a significance level of $p<.05$ was established for testing the hypotheses using hierarchal regression. Table 4.6 indicates p-values of $p<.05$, $p<.01$, and $p<.001$. All p-values less than .05 will be considered statistically significant for the discussion of the results. While it is important to consider significance at other levels, doing so should be accepted cautiously; however these values can also help to provide a deeper understanding of the data and indicate what specific factors contribute to the observed variance. Table 4.5 contains a comprehensive summary of all variables included in the regression.

   Overall, the regression analysis for this study indicated that race, type of institution, location, number of students' enrolled, compositional diversity, and a supportive racial climate explained a significant amount of variance (32.3%) in the interactional diversity of students at the selected institutions. Table 4.6 consolidates the findings of the model and indicates R, R^2, and the adjusted R^2 and R^2 Change. Also, included are the F Change, Significance of F Change, Significance of Beta and overall

Significance of the block in the regression. Refer to Table 4.6 for the results of the regression. A total of 1,698 students participated in the analysis. Several were removed for incomplete responses for specific items on the NSSE survey. Overall the entire model explained a total of 32.3% of the variance for all of the blocks that test this hypothesis.

Specific results from each of the blocks are presented in Table 4.6. The contribution of each variable can be examined by looking at the significance of each variable, and the percent of variance explained by each block after controlling for the influence of the blocks previously entered. As the models were built, several variables were significant until additional variables were entered. This may indicate that later variables may have some shared variance with earlier variables that would explain the variance contributed to the dependent variable, interactional diversity. Only the final model accounting for 32.3% of the variance in interactional diversity is presented here.

Block 1: Demographic Information

As a block, Demographic Information, which includes race and gender, explained .5% of the variance (See Table 4.6). In this block race was significant with a p-value less than .01. The interactional diversity of students was enhanced by the students' race regardless of gender. Students of color had significantly higher levels of interactional diversity on selected campuses.

Block 2: Institutional Factors

Block 2 significantly adds 4.8% to the variance. Institutional factors of type, location, size, and compositional diversity were significant. The negative beta indicates peer institutions had higher interactional diversity than COPLAC institutions. Student enrollment (meaning the size of institution) was also significant. The negative beta

indicates that smaller institutions had higher interactional diversity. Compositional diversity indicated significantly lower proportions of Hispanic students and higher proportions of Asian American students contributed to interactional diversity at the selected institutions with no effect for proportion of African American or Native American students.

Block 3: Class Standing

Block 3 contributed .2% of variance to the model and was not significant. This block included class standing (freshman or senior). Overall, this block added very little to the model. This analysis shows freshmen and seniors are more alike than different.

Block 4: Supportive Racial Climate

Compared to the other blocks in this model, Block 4 added the most variance, 26.8%. Supportive Racial Climate is the only variable entered in Block 4, which was a positive indicator for interactional diversity.

Model Summary

Although this model does not have a large number of variables, R^2 values with the Adjusted R^2 value (Licht, 1995) were still examined to determine predictive value. The closer the two values are, the less likely extraneous independent variables were included in the model. R^2 value and the Adjusted R^2 value of the model were .323 and .318 respectively. These values would suggest that the independent variables had a small level of significance.

Overall, the model explained 32.3% of the variance of interactional diversity on the selected campuses. Positive predictors are race, size of enrollment, location of

institution, type of institution, compositional diversity, and students' perceptions of a supportive racial climate.

Table 4.5: Interactional Diversity Scale Descriptive Statistics

	Characteristics	**N**	**Mean**	**SD**
Gender	Male	489	10.56	.12
	Female	998	10.57	.08
Class Rank	Freshman	777	10.70	.10
	Senior	710	10.42	.09
Institution	COPLAC	394	10.25	.13
	Peer	1,093	10.68	.08
Race Students of Color	White	1283	10.38	.07
	Students of Color	161	11.36	.91
Institution Location	Large City, Mid-Size City, or Urban Fringe of Large City	767	10.63	.10
	Small Town or Rural	704	10.49	.09
Student Enrollment	1,900 or fewer	206	11.33	.20
	1,900-2,350	364	10.29	.14
	2,350-3,000	517	10.38	.11
	More than 3,000	357	10.36	.14
Compositional Diversity	IPEDS: % African American	1698	1.82	.857
	IPEDS: % American Indian	1698	1.29	.455
	IPEDS: % Asian/Pacific Islander	1698	2.00	.754
	IPEDS: % Hispanic	1698	1.87	.698

Table 4.6: Summary of Hierarchal Regression Analysis

Dependent Variable Interactional Diversity

Block /Variable (N=1495)	R	R²	Adjusted R2	R Square Change	F Change	Sig. F Change	Beta(β)	Sig.
Block One: Demographic	.068	.005	.003	.005	3.51	.030 *		
Gender								
Male							.011	.670
Female								
Race								
Student of Color							.068	.008**
Block Two: Institutional Factors	.229	.052	.047	.048	10.66	.000***		
Type of Institution							-.081	.004**
COPLAC								
Peer								
Location of Institution								
Large city								
Small town							.128	.002
Student Enrollment							-.056	.039*

Compositional Diversity								
IPEDS: % African Americans							-.006	.838
IPEDS: % Native Americans							.032	.262
IPEDS: % Asian/Pacific Islander							.280	.000***
IPEDS: % Hispanic							-.089	.015*
Block Three: Student composition	.233	.054	.048	.002	3.41	.065		
Class Rank							-.045	.064
Freshman (1st year)								
Senior								
Block Four: Supportive Climate	.568	.323	.318	.268	587.67	.000***		
Supportive Racial Climate							.526	.000***

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

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Summary

Chapter Four began with a description of the sample respondents by background and characteristics for the overall sample and by selected institutional type. An analysis of the difference in perception of the campus racial climate by selected variables revealed that freshman, in comparison to seniors, felt that there was a more supportive racial climate. Neither race nor type of institutions revealed any significance regarding students' perceptions of a supportive climate.

When analyzing students' diverse interactions, the hierarchical regression revealed that perceiving a supportive climate was the best predictor for interactional diversity. The next chapter, will begin with a discussion of the major findings of this study. This discussion will also include interpretations of these findings with a focus on extant theory and research. Implications of these findings for theory and practice will be offered. Discussion will then include an assessment of the limitations of this study. Finally the chapter will conclude with suggestions for further research.

CHAPTER V - DISCUSSION

This chapter summarizes and discusses the findings regarding the research questions guiding this study. Several frameworks were used in developing this study. In particular, Hurtado and associates (1998) and Milem et al., (2004) provided a view that focused on campus racial climates and diversity while Astin (1993) and Kuh (1995) provided an understanding of student engagement on college campuses. The framework for studying and enhancing campus racial climates by Hurtado and associates (1998) provided an understanding of diverse student populations, the association of higher levels of interaction among diverse groups of students and its impact on the climate of the institution.

In conjunction, these models served as guiding frameworks to test the relationships regarding students' interactional diversity and their perceptions of a supportive racial climate at liberal arts colleges and universities. This chapter summarizes the findings and conclusions of the two research questions in relation to the statistical techniques used to answer them. Additionally, implications for practice and the limitations of the study will be reviewed. Lastly, future research for the study will be discussed.

Results of the Study

Campus climate has been understood as a measure of the campus environment in its relation to interpersonal, academic and professional interaction (Hurtado, 2007). Whether real or perceived, it is a reflection of one's experiences. There is no doubt that

the presence of individuals from different backgrounds is one description of campus diversity. At the same time, the quality and extent of their experiences as well as the interactions between various groups determine the climate. Understanding the climate of our institutions benefits all students, faculty, staff and administrators. In unhealthy climates, students--both majority and minority--are less likely to thrive academically or socially (Milem et al., 2005). The very mission of the university can be impacted by the climate of the institution. Many of the results of this study support the framework for understanding racial climates on campuses developed by Hurtado and colleagues (1998).

(1) The compositional structure of the selected institutions in this study demonstrated that small numbers of students of color create possible challenges for the institutions on the way to realizing a diverse campus. The numbers of students of color are important and have impact upon how students feel about the campus and how they experience the campus (Gurin, 1999).

(2) As revealed by the results of this study, students' perceptions of a supportive racial climate and student's interactional diversity suggest that the selected institutions had developed an organizational structure that provided programming, structure and practices to allow some students to feel welcome, specifically entering freshman. It also highlights the need for more institutional programming for students beyond the first year.

(3) The legacy of inclusion or exclusion is evident as entering students indicate feeling more welcome, while a small number of seniors and females did not feel a supportive racial climate. Research continues to demonstrate students' feelings of discrimination and feeling unwanted on college campuses (Fries-Britt, Younger & Hall, 2010).

(4) The psychological dimensions of how students feel about the campus also contribute to how the climate of the campus is perceived. The results indicated a varied perception of a supportive racial climate. Additionally, student's feeling regarding interactional diversity revealed varied comfort levels among students of color and White students. Results indicated lower levels of interactional diversity on campus when there are higher numbers of Hispanic students, revealing issues of discomfort for students on specific campuses.

(5) Behavioral dimensions of the campus climate suggest that increased involvement on campus is important for students to have a successful college experience (Gurin, 1999; Antonio, 2001). Results from this study indicated that the students who perceived a supportive racial campus increased interactional diversity on campus. Students felt there were opportunities created to engage with racially diverse groups of students, faculty and administrators.

This study revealed that we can continue to use the lens provided by Hurtado and colleagues to understand climate issues on college campuses to assist with creating positive outcomes for students of color.

Understanding Campus Climate

The first hypothesis explored how campus climate was perceived. The results of this study indicate that the perception of a supportive racial climate does vary by class rank (freshman or senior status). A supportive environment is perceived more positively by freshman than seniors. While information for individual institutions and programs was not provided for entering or continuing students, it is reasonable to assume that many institutions provided programs for entering first year students to assist them with

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acclimation to the institution. First-year seminars, residence hall programming, pre-college transition programs and orientation activities focused on student engagement may provide an understanding regarding these results (Council for the Advancement of Standards in Higher Education, 2008).

White students and students of color did not differ on their perceptions of campus climate. The findings in this study may not have revealed the effects due to the small number of students of color at these selected institutions. Possibly a larger N for students of color may have provided different results. However, the way minority students of color adjust to campus life is also influenced by structural and environmental aspects of the campus (Fischer, 2007). Empirical work on this issue suggests that students of color who create their own social networks on PWIs have a more positive outcome (D'Augelli & Hershberger, 1993). Studies continue to indicate that White students do not experience the racial climate of the campus the same way as students of color (Rankin & Reason, 2005; Locks et al, 2008). These students often viewed the institutional climate as more accepting, nonracist, friendly and respectful (Rankin & Reason, 2005). As for students of color research continues to confirm that positive interactions with diverse peers will have a positive effect on student's sense of belonging in comparison to the total amount of time students spend socializing (Locks et al., 2008)

There was no difference in peer or COPLAC institutions with respect to campus climate in general; however, senior female students of color at COPLAC institutions felt less support than any other group. Research supports that while female students of color have surpassed their male counterparts academically, they must often endure more stress and greater social opposition to their achievement (Curry, 2005). For many female

students, particularly female students of color, culture, ethnicity and socioeconomic factors produce difficulties which create higher levels of stress. It is noted that over time resilient students have turned racism and oppression into a drive to excel academically (Gayles, 2005). While the students in this study have persisted to their senior year, this may suggest that these students have found ways to persist and develop positive social networks.

Additionally, in this study, senior male students of color at peer institutions demonstrated a significant drop in their perception of the supportive racial climate. Since the numbers of male students of color were very small in the survey, further study is warranted. The peer institutions used in the study have a racial composition ranging from 3% to 15% of minority students on their individual campuses. At the same time, many are also small and reside in rural communities. These factors may confirm existing research regarding students of color feeling isolated and alienated (Steele, 1999) as well as a lack of support and tolerance (Hurtado, 1994). The study also affirms the research that suggested a need for a critical mass of minority students to feel safe and comfortable (Fleming, 1984; Hagedorn, Chi, Cepeda & McLain, 2007). Continued research in the field addresses the needs of male students of color and their levels of satisfaction and persistence in higher education supporting the need for more programming to this population (Laird, Bridges, Holmes, Morelon & Williams, 2004; Nunez, 2009; Rodger & Summers, 2008). African American males have the worst completion rates among both sexes and racial/ethnic groups (Harper, 2006). However, retention rates increase for both Black and Hispanic men when they are more involved in the institution (Fischer, 2007). Additionally, current research suggests the need for more studies focused exclusively on

students of color within a specific institutional context, without comparing them to their same race peers at PWI's (Harper et al., 2004).

Results from this study suggest that the types of institution (COPLAC and peer) are more similar than different in determining students' perception of a supportive racial climate. The institutions used in this study were small to mid-size in enrollment numbers, and all were predominantly White institutions. The selected institutions, whether peer or COPLAC, were not racially diverse and possibly more similar in their approach to providing a supportive racial climate. Research by Sarah Willie (2003) suggested that many African American students will sacrifice comfort and engagement in their selection of an institution. Instead, the reputation of the institution guides their selection, more than other factors.

The findings in the study support prior research and the call for further racial climate studies. LaNasa, Cabrera and Trangsrud (2008) reported that of the five NSSE benchmarks, only Supportive Campus Environment appeared to meet construct measures. The reliability of this scale was relatively high (r $_{xx}$ =0.79). Additionally, structural correlations were found between Supportive Campus Environment and Student Faculty Interactions and Academic Challenge and Active & Collaborative Learning (0.59). This highlights that the benchmarks set forth by NSSE, which helped to guide this research study, may need further review.

Factors Contributing to Interactional Diversity

The results of this study indicated that interactional diversity is best predicted by a student's feeling that the campus climate is supportive. Collegiate factors also matter

when understanding diverse student engagement. Campus programs, time spent socializing on campus (with students, faculty and staff), student predispositions toward engaging in diverse activities, and the campus racial climate all matter. Research suggested that these collegiate factors influence student engagement (Antonio, 1999; Astin, 1993; Chang et al., 2005; Locks et al., 2008; Zuniga, Olson & Winter, 2005). College personnel can encourage environments that can facilitate the interaction of diverse student engagement.

When students feel comfortable, their desire to interact with other students, faculty and staff is greater. This model explained 32.3% of the variance in interactional diversity. Informal interactional diversity was more strongly related to a supportive racial climate than other variables entered into the analysis, explaining 26.8% of the variance in the model. The strength of the relationship between informal interactional diversity and supportive climate indicates that positive experiences with diversity on college campuses are more likely to occur when all students feel welcome and supported. While the results indicated that race/ethnicity has a significant effect on interactional diversity, it does not account for a large amount of variance in the model. This may be due to the very small number of students of color attending the selected institutions.

The findings also indicate that there was more interactional diversity for all students when the proportion of Asian American students to other students of color was higher. The percentage of Asian American students in the last two decades has increased substantially in comparison to other minority students (Hune, 2002). Studies suggest Asian American students were more comfortable interacting with Whites and least comfortable with African Americans (Lowery, Hardin & Sinclair, 2001; Mack et al.,

1997; McCormack, 1995). The findings suggest that at these small institutions when there are more Asian American students all students have increased interactional diversity.

Other findings display negative results for Hispanic student interaction. Lower proportions of Hispanic students led to more interactional diversity on campuses. Data suggested that when the numbers of Hispanic students increase, the interactional diversity on campus lowers. This is certainly surprising and requires further research. Integration on college campuses for many Hispanic students is often not culturally supported and may hinder their success and engagement (Hurtado & Ponjuan, 2005). Language barriers may also present themselves for Hispanic students creating barriers to engaging with other students. The research indicates that Hispanic students may need to find a sub culture on campus that is responsive to their needs regardless of the type of institution (Hurtado & Carter, 1997). However, all students benefit from diverse interactions (Astin, 1993; Kuh, 2001) and the level of student engagement directly translates to cognitive and social benefits (Pascarella & Terenzini, 2005).

This study also indicated significance for type of institution as it relates to informal interactional diversity. Because of the limited selection of institutions, this study could not corroborate the findings of Umbach and Kuh (2006), that students attending liberal arts colleges report higher levels of informal interactional diversity than students at other types of institutions. However, the size of the institution did seem to have a small significant effect upon the informal interactional diversity of the students. Location of the institution seemed to suggest that institutions in more rural settings have more diverse interactions. Due to the limited number of institutions studied, it is difficult to determine if the structural diversity of an institution will negatively or positively affect students'

behavior (e.g., interactions with diverse peers). However, it does suggest that the size of the institution should not hinder institutions from providing programs that create a welcoming environment for all students.

Lastly, the model does not explain 68% of the variance. Possible explanations may include students' pre college environments. Approximately 90 percent of White students and 50 percent of African American students grow up in segregated neighborhoods and attend racially segregated high schools (Gurin, Dey, Gurin & Hurtado, 2004). Students may not have experienced cross-cultural interactions and therefore are not skilled at diverse interactions when they entering a new racially diverse environment. How students select the institution they attend is also undetermined. It may be based on region of the country or socio-economic factors. Understanding how and when institutions provide programs becomes important in determining students' perceptions of feeling comfortable and capable of interacting with diverse peers. Understanding diversity on college campuses suggest interactional diversity encompasses more than just the composition of the students, or the type of institution selected.

Limitations

This study analyzed results from the 2005 NSSE survey from 20 specifically selected institutions. While results from the NSSE are often consistent with NSSE results from various years, this study only utilized data from one year and did so only with specifically selected institutions. If all of the institutions participating in the 2005 study were used, or multiple years of data for the specified institutions were used, the results may have differed in unknown ways. In addition, the data in this study is cross-sectional, not longitudinal. Using longitudinal data would provide information of student

engagement and interaction over time at selected universities. With information about student interaction over-time from freshman year to senior year, new and useful understandings could possibly emerge. The inclusion of sophomore and junior status perceptions would assist with understanding the perception of the campus.

Additionally, students who select liberal arts institutions may not have a predisposition to selecting institutions where they could meet people from different backgrounds or institutions that will provide this opportunity. Furthermore, results from the NSSE are not screened for pre-existing student conditions, or students' predisposition to satisfaction with college. Brooks (2005) suggested that when using the NSSE for cross-institutional comparisons, researchers should pay attention to any unique or contextual factors that could shape student expectations. The many similar features of selected peer institutions may produce results with little meaning. The Carnegie Classification scheme is quite diverse within the categories used to characterize selected institutions; however, it is the most highly used system at this time. With this in mind, the data from some institutions may appear small in comparison to larger institutions. However, the information should not be discounted since even small amounts of data may give insight into understanding diversity and campus climate.

The NSSE is a relatively short survey that does not necessarily measure many relevant aspects of interactional diversity or campus racial climate. If additional questions were included in the survey, different findings may have emerged. While the study illuminates how students perceive the racial climate and diversity interactions on their campuses, there are still other influences and variables that need to be explored to gather a more complete picture from these liberal arts institutions. Questions exploring pre-

college conditions, engagement with diverse peers prior to college attendance, family backgrounds and students' choices for their selection of specific institutions should be explored. Understanding the students' experiences before they attend college can be as illuminating as what happens when they arrive and how they experience diversity. Are there other characteristics that have a significant effect on students' perceptions of the racial climate? Are there additional variables that could help understand students' interactional diversity?

A study by LaNasa, Cabrera, and Trangsrud (2008), using data from a single institution, indicated possible construct validity problems with the five benchmarks used to promote student engagement by NSSE. A more detailed examination of the answers by race may help to explain students' perceptions. Future research could examine each question's response by race to determine if significant differences exist. An ANOVA could be run for those questions or MANOVAs for any series of questions. It should be noted that the very small N for students of color should not be overly interpreted. Of course, the results for this analysis would only be meaningful with a large N for students of color. The low numbers of students of color at the selected PWIs creates an even greater need for their voices to be uncovered and examined. Specifically, Native American students, whose numbers are so low that they often are overlooked, may offer insight into understanding how they perceive the climate of the institution. More defined information by race and ethnicity would help to uncover those students who feel most disengaged from the campus.

The literature informed us that external and internal forces interact to create the racial climate of the institution (Hurtado et al., 1998). The dimensions outlined in the

literature indicated that diversity initiatives at the institutions can provide important evidence as to how the campus climate is shaped and the effects of the efforts for each institution. For this study, information about the diversity initiatives at the individual institutions and whether the students responding to the survey participated in those initiatives was not available. Understandably, campus climates are unique from one environment to another. Climates will vary between and within each campus. Therefore, campus climates must be assessed individually and by individual programs and departments on each campus.

Implications for Practice

The results of this study produced meaningful insights into diversity interactions and student perceptions of the racial climate on liberal art campuses. Findings from this study support the meaningful role that perception of campus racial climate brings to enhancing interactional diversity on campus. Focusing on increasing perceptions of campus climate is critical.

The study indicated that an institution does not have to be highly compositionally diverse for students of color to have positive feelings of support on campus. All of the institutions in the study were small to mid-size PWIs; however, results indicated that both White students and students of color in their first year felt a supportive racial climate on their campuses. Other, larger institutions could look to these institutions for ideas as to how they promote diversity experiences to their students. Conversely, small liberal arts institutions can look to some of the larger universities that have effectively developed diversity initiatives for undergraduate programs. For example, the University of Michigan and the University of Maryland have innovative programs to enhance cross-group

interactions (http://www.ohrp.umd.edu/WE/index.html;

http://meldi.snre.umich.edu/taxonomy/term/183). These institutions have created

programs, offices and intergroup dialogues that allow students the opportunity to interact

and discuss issues related to their diversity experiences.

While it is clear that the findings in this study suggest that institutions have made

strides with first year students, it is alarming that something seems to happen to students

by their senior year. Given the documented research in the field of student engagement

and retention, it is evident that more attention to *continuing to foster* a supportive climate

beyond the first year is imperative. Knowing that racial tension for Black and Hispanic

students is significantly correlated with students' satisfaction of their college experience

and retention (Nora and Cabrera, 1996; Steele, 1997), institutions must consistently

create a supportive climate for all students. Positive interactions with diverse peers have a

stronger effect on a students' sense of belonging (Locks et al., 2008).

Ultimately, there must be an institutional value placed on diversity and the

creation of programs and activities that promote its growth and development. Although

this study did not address specific factors that promote campus climate, the literature

offers many such recommendations. The creation of safe classrooms that encourage open

dialogue and discussions, allow for various learning styles, multicultural curriculums and

racial identity development are all ways in which faculty can begin to provide support. If

faculty can model learning jointly constructed (Baxter Magolda, 1992), students and the

faculty will begin to create learning environments of confidence and trust. Knowing that

students of color continue to experience subtle forms of racism and ostracism in the

classroom (Suarez-Balcazar et al., 2003), it is important for institutions to dedicate

resources, training and attention to improving classroom experiences for students of color.

Many student affairs professionals, staff, and faculty may agree that continued education is needed regarding ethnically diverse populations of students attending college. Comprehensive programs for administrators, faculty, staff, student affairs practitioners, residence hall staff, university police, and other unclassified staff should be an institution-wide mission. Proactively providing programs that address racism, cultural training, and programs that build positive group interrelations are most effective in the development of a supportive campus climate. Three decades of research support providing additional diversity friendly policies that will have a powerful effect on student behaviors and outcomes (Pascarella & Terenzini, 2005; Pike & Kuh, 2006). A commitment to change must begin from the President, Provost, Vice Presidents, and Deans, with the inclusion of comprehensive changes and institutional structures in place to guide these changes. This is necessary to have a committed change in the campus racial climate. This could enhance not just students' of color academic and social development, but increase all students' satisfaction with college. Current research supports enhancing multiculturalism and diversity to increase students satisfaction with their college experience (Fischer, 2007), creating collective cultural agents (Museus & Quaye, 2009) such as academic programs, informal peer groups, cultural centers, and student organizations in the existing campus cultures with whom students can connect. Developing activities which integrate faculty and staff with students' to increase academic interaction are important. More interaction of faculty can be achieved by developing group projects in the classroom, along with capstone courses for seniors and

career programming for rising seniors. These initiatives have proven to support retention of students of color (Gonzalez, 2003; Fischer, 2007). A positive perception of the campus racial climate is beneficial to all students.

Suggestions for Future Research

The concepts of student engagement and integration are not necessarily inclusive terms. Harper, Hurtado and Sax (as cited in Wolf-Wendel, 2009) suggest that what matters is the quality of the interaction, rather than just being engaged in an activity. It is now more valuable to explore the types of activities students engage in and to determine which forms of engagement are more effective for certain types of students. As pioneers of integration theory now confirm, it is not about integration, but about creating a sense of belonging and a relationship with the campus (Wolf-Wendel et al., 2009). Is it a place where the student feels like he or she belongs, can they adapt to the norms of the campus culture and become transformed by the connection? Future research will need to continue to explore which activities and connections have a positive effect upon students of color. Additionally, researchers will need to ask how these connections make a difference in the campus culture.

Future research will also need to assess the activities that students of color participate in and then listen to the voices of the students as a way to inform and guide programmatic decisions. The use of qualitative methods will capture the nuances of the student experience which cannot be attained through quantitative measures. Qualitative research can extend the understanding of the way engagement changes over time. Great potential exists in this regard. Capturing student voices could be obtained through ongoing programs, open forums, or cultural audits. A mixed methods approach would

provide a way of exploring issues of how we think of engagement, and what it means to different groups of students. Such efforts should become an important part of the research agenda in the field, thereby making this type of research the norm rather than the exception.

Further research is needed to explore the interactional diversity for all students when the proportion of Asian American students is higher than other minority student groups on campus. Are White students possibly more comfortable with Asian students versus other students of color? Is the comfort of Asian students directly related to the behaviors of White students?

Additional research is warranted to understand declining feelings of a supportive racial climate by students during their senior years. Do institutions lack programs to promote diversity throughout their college experience, or are there issues of deterioration from the many years of cultural oppression? Exposure to discrimination and prejudice on campus is viewed as the difference in minority and non-minority withdrawal behavior (Smedley, Myers, & Harell, 1993). Feelings of discrimination and prejudice can result in psychological stressors that ultimately can lead to maladjustment at the students' institution. Future research should focus on the origins of these feelings and stressors and ways to identify these indicators early in the students' academic career.

More research is needed to understand the types of experiences that yield long-term benefits. Very few multi-year studies exist to understand the long-term effects of the programs provided on our campuses. Inversely, what are the long-term effects for those students who felt disengaged throughout their college experience? The research agenda

is long, and our campuses remain important sites of inquiry as we continue to recruit, admit and educate diverse students.

Conclusion

The results of this study indicate that a perception of a supportive campus climate can increase students' interactions among diverse groups. It is not evident that the size or type of institution will make a difference in the effects of the campus climate or the interactions among the students. The results seem to suggest that the interactions depend on the nature and quality of the interactions, and less on other institutional factors. While the size of the institution may not dictate the beneficial experiences students have, it is important to continue recruiting students from a broad range of backgrounds, including race and ethnicity. Obviously, without some compositional diversity in place, the kinds of cross-cultural interaction that are important to student growth and development would not occur. However, increasing the compositional diversity of an institution is just the first step. Once students of diverse backgrounds are admitted to college campuses, institutions must begin to uncover ways to make this beneficial for all; to proactively change policies and institutional structures to fully achieve educational and developmental goals for an inclusive learning environment.

Restating an earlier premise, administrators, staff, and faculty should attempt to make early cultural connections with students so that this becomes a part of the lived campus experience. Interpersonal connections should be established; faculty and staff mentoring relationships should start early and then continue throughout the students' college experience. Institutions need to consider investing in their students over time. That degree completion rates are lower for underrepresented populations and that the six-

year completion rate for African American and Hispanic students is only at 46% compared to White students (Berkner et al., 2002 is a persistent issue for institutions. Current research by Kuh et al. (2008) indicates that engagement in effective educational practices has benefits for all students, especially students of color through their second year of studies. This was especially true for students who may be academically under-prepared or first generation college students (Cruce, Wolniak, Seifert, & Pascarella, 2006). Great strides have been made in engaging freshman, but continuing these connections could make a difference in student retention and the campus racial climate. These programs should be high quality, embedded in campus culture and designed to meet the needs of the students they are intended to assist. Additional research can then begin to explore what programs need to be in place in order to support students beyond their first year.

The findings also suggest the need to explore the changes of student perceptions of the campus racial climate overtime. When do students begin to become disillusioned with the environment, what programs are no longer in place, or are there other institutional factors which contribute to such disillusionment? The findings underscore the importance of institutions investing resources in developing and supporting programs that encourage meaningful interactions of diverse students for their entire college experience. It becomes our responsibility to provide the most welcoming and educationally inspiring climate for all students throughout their entire academic program.

COPLAC Institutions	Peer Institutions
Georgia College and State University (GA)	College of the Holy Cross (MA)
Massachusetts College of Liberal Arts (MA)	College of Wooster (OH)
New College of Florida (FL)	DePauw University (IN)
Ramapo College (NJ)	Franklin and Marshall College (PA)
St. Mary's College of Maryland (MD)	Furman University (SC)
Southern Oregon University (OR)	Hope College (MI)
Truman State University (MO)	Kenyon College (OH)
University of Maine at Farmington (ME)	Luther College (IA)
	Macalester College (MN)
	Muhlenberg College (PA)
	Susquehanna University (PA)
	Wittenberg University (OH)

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