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RESEARCH STUDIES IN HIGHER EDUCATION: EDUCATING MULTICULTURAL COLLEGE STUDENTS- Ch 7

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Chapter Seven

Examining Involvement as A Critical Factor: Perceptions from First Generation and Non-first Generation Students

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Introduction

Research shows that even after controlling for pre-college characteristics and within-college experiences, differences remain in the persistence rates of certain student subgroups in higher education, with underrepresented students of color persisting to graduation at a lower rate than their White counterparts (Astin and Oseguera, 2005; Harvey, 2003). The research on first generation students reveals that some of their academic and personal characteristics such as being less academically prepared for college, having lower rates of completion in higher-level mathematics courses in high school, and coming from families in lower socio-economic levels may affect their success in college (National Center for Educational Statistics, 2005).

Since student persistence has long been associated with parental educational levels, important differences between first generation and non-first generation students were not explained in the original conception of Astin's (1984) Student Involvement Theory (Braxton, 2002). Because parents transmit their values and attitudes to their children, the children from homes with more educated parents are more likely to value higher education (Pascarella and Terenzini, 1991, 1998, 2005; Pascarella, Pierson, Wolniak, and Terenzini, 2004). When examining student involvement on campus, some of the strongest predictors of college persistence usually include; effective academic advising, involvement with faculty, living environment, classroom experience, and extracurricular activities (Levin, 1998). Involvement for first generation students has been found to be less frequent compared to traditional college students. First generation students are less likely to have the time to participate in campus activities outside the classroom (McConnell,

2000). Considering barriers like background characteristics and family obligations, first generation students find it hard to navigate and get involved in many “out-of-class” experiences. As we start to examine first generation college students, it is clear that studies on specific sub-groups (ethnic minorities) of first generation students are limited.

The purpose of this chapter is to provide findings from a research study that examined nine critical factors that affect persistence of ethnic minority first-generation and non first-generation undergraduates at Eastern Illinois University. It also sought to identify if there are differences between first generation and non-first generation college students’ in each of the nine areas of involvement. Four research questions were addressed: 1) How do first generation and non-first generation students differ in terms of their experience across nine involvement components?; 2) Is there a difference between African American and Hispanic students and their involvement in the nine involvement components?; 3) Which areas of involvement are most predictive of students’ perceived likelihood to be connected to the university?; 4) How are the students’ perceptions of their overall involvement predictive of their perceived likelihood to graduate? Because the first generation student is so unique with regard to involvement, this study also measured some of the important differences in social integration for these students. This chapter reviews an understanding of involvement and socio-cultural factors that influence first- generation and non first-generation minority students.

Research on First-Generation Students

In the late 1960s and early 1970s, access to higher education was again transformed when the report from the President’s Commission of Higher Education established a more affordable education with the community college system (Humphrey, 2000). This was the beginning of equal educational opportunity for all students in the United States. In 1971, first generation students represented 38.5 percent of all first-time college freshmen (Saenz, Hurtado, Barrera, Wolf, and Yeung, 2007). Research indicates that first generation students differ from their peers in many ways prior to college enrollment, including their demographic characteristics, the importance they place on college, their aspirations, their perceived level of family support for attending college, their institutional choice and commitment, their pre-college knowledge and behaviors, and their entering academic skills and confidence levels (McConnell, 2000). Once first generation college students enroll in college a lack of social and/or cultural capital—in the form of non-college educated parents—can serve to undermine the access to resources for first generation college students (Saenz et al., 2007).

Challenges this group faces are sometimes overwhelming because they do not have parents who are familiar with higher education and they are not able to navigate as well as their non-first generation counterparts. These first generation students are also more likely to work more than thirty hours per week and be

academically underprepared for college-level work (Thayer, 2000). Although the national average of first generation students enrolled in college was 38.5 percent in 1971 among entering freshmen, the proportion was much higher for Latinos (69.6 percent), African Americans (62.9 percent), Native Americans (44.8 percent), and Asian/Asian Americans (42.5 percent) (Saenz et al., 2007).

Transition to college has also proven an obstacle for first generation students. Because these students were breaking family tradition, college attendance often involved multiple transitions for their academic, social and cultural integration (Terenzini, Rendon, Upcraft, Millar, Allison, Gregg, and Jalomo, 1994). These transitions could include motivation, academic skills and cultural values. Attending and completing college carried the potential for radical changes in these students and the lives they led (Terenzini et al., 1994). One of the biggest challenges for first generation students is deferring involvement in non-academic activities and life on campus until they felt they had their academic lives under control (Terenzini et al., 1994). This is in contrast with traditional non-first generation students who typically were involved right away. In this study, the traditional students were worried about making new friends and getting socially connected even before mastering academic work. Because first generation students do not have a familial experience providing support, what happens once they get to college (within and outside of the classroom) is a critical predictor for post-secondary outcomes (Hahs-Vaughn, 2004). Most of the studies that have been conducted on first generation students examine the characteristics that make it difficult for them to persist in college. If a college student fails to receive support for college attendance from friends and family members, then early departure from college is likely (Elkins, Braxton, and James, 2000). Students who break their family traditions deal with issues such as: changing their identity, being perceived as different, leaving old friends behind, separating from their families, breaking family codes of unity and loyalty, and living between two worlds (Rendon, 1995). For minority students, leaving old friends and separation from family could be difficult. Nora, Cabrera, Hagedorn, and Pascarella (1996) found that the transition to college is smoother for minority students who have supportive family and friends from their past. Although some evidence indicates that emotional and financial support provided by families is key to the academic success of Latino students, other findings suggest that the struggle between familial obligations and requirements of school can contribute significantly to a difficult academic adjustment and to low retention rates in these students (Rodriquez, Mira, Myers, Morris, and Cardoza, 2003).

Hsiao (1992), in her review of research about first generation students and minority students, concluded that having parents, siblings, and friends with no college experience resulted in the lack of an adequate support system for the student and possibly posed an obstruction to persistence in college. Billson and Terry (1982) took a different turn and examined how some of these barriers (opposed to characteristics) could prevent first generation students from graduating. They wanted to study some of the barriers outside of academic areas such as: where students live and/or their lack of social integration (Billson and Terry, 1982).

Billson and Terry (1982) also found that first generation students were not as socially integrated as non-first generation students because they were less likely to live on campus, be involved in campus organizations, establish their most important friendships on campus, or work on campus. Particularly as students began to take on the symbols of the college culture—be it style of dress, taste of music, or range of vocabulary—first generation students often sense displeasure on the part of acquaintances, and feel an uncomfortable separation from the culture in which they grew up (Hsiao, 1992).

Minority Student Persistence

In 1954 the *Brown v. Board of Education* decision abolished segregation based on race in public schools. The *Brown* ruling is the most cited case in terms of desegregating elementary and secondary education which indirectly affected higher education attendance for African Americans (Allen, Jayakumar, Griffin, Korn, and Hurtado, 2005). Before *Brown*, Blacks were excluded from the American body public and defined as second-class citizens under the doctrine of “Separate but Equal,” established in constitutional law by the 1896 case *Plessy vs. Ferguson* (163 U.S. 537 (1896)). It has been over fifty years since civil rights policies and federal legislation were established to promote equality in access to higher education for people of color, women and the economically disadvantaged. According to the 2006 American Council on Education (ACE) report, minority students made dramatic gains in college enrollment after the *Brown* decision, increasing by nearly 1.5 million students, or 50.7 percent. Although the number of minority students has increased over the last four decades, African American students show a declining proportion of first generation representation, dropping by almost two-thirds from 1971 (62.9 percent) to 2005 (22.6 percent), (Saenz et al., 2007), a point illustrated in Table 7.1. The evidence that racial/ethnic groups and first generation students may be less equipped for college is an important distinction that affirms the importance of increasing the attention paid to higher education institutions about this population (Zalaquett, 1999).

Black and Hispanic students are more likely to be first generation college students and to come from low socioeconomic (SES) backgrounds. In addition to these family background characteristics that may put them at a disadvantage, students of color may be subject to adjustment difficulties rooted in the experience of being a minority student on a predominantly White campus (Fischer, 2007). As a category of students, “Black and Hispanics may not have had the advantages of being socialized and nurtured into having developed the competencies and framework for competitive learning in a middle-class place called college” (Betances, 2002; p. 47). Notable opportunities for these groups to participate and

Table 7.1. Racial/Ethnic Breakdown of First Generation Students Over Time

U.S. Population (25 years or older) w/No College Education	1975	2005	% Change
African American People	84.50%	55.70%	-34.10%
Hispanic People	85.00%	69.10%	-18.70%
White People	72.80%	42.80%	-41.20%
Total/All People	73.70%	47.00%	-36.30%
First Generation College Students			
African American People	51.50%	20.40%	-60.30%
Hispanic People	57.60%	35.80%	-37.80%
White People	28.90%	12.90%	-55.40%
Total/All People	31.20%	15.90%	-49.00%

From Cooperative Institutional Research Program, Higher Education Research Institute, 2007.

enroll in four-year institutions began with the start of education policies and financial aid initiatives which consist of programs like the State Student Incentive Grant programs during the mid and late sixties (Cross, 2001). Although the State Incentive Grant Programs were created to promote educational opportunities for the poor; the report of the federal Advisory Committee on Student Financial Assistance (2001), *Access Denied*, documented the gaps in college participation between the rich and the poor. Similar gaps in college participation exist between White youths, and African American, Native American and Latino students, driven at least in part by the strong correlation between race and income in this country (Heller, 2003). Between 1969 and 1979, minority students enrolled in predominantly White colleges in increasing numbers, due in part to the greater access afforded by affirmative action programs (Smedley, Myers and Harrell, 1993). Equal opportunity and affirmative action programs gave people of color, women, and others routinely pushed to society's fringes, the chance to prove their worth (Allen et al., 2005).

During this time, maintaining a culturally diverse student body, including adequate representation of minority students in the total student body was the educational goal for almost every university in this country. Gaining entry to college was a dramatic accomplishment for some but persisting to degree completion is what really mattered in the post-college world (Swail, Redd, and Perna, 2003). These affirmative action programs did not guarantee success; they merely provided the chance to compete and the opportunity to succeed (or fail). Some early findings by Tracey and Sedlacek (1985) found that the academic adjustment and achievement of African American and other minority students are influenced by different sociocultural and contextual factors (i.e., student satisfaction with college, peer group relations) than those that have an impact on White

students. Culture is extremely important for students of color because, for them to be successful in college, these students need to affirm their own cultural identities in order to be successful (Tierney, 1999). He also pointed out that the more minority students affirm their own cultural identities, the more their chances for graduation increases.

Involvement Areas

To define theoretically how some of these factors contribute to first generation and non-first generation African American and Hispanic students' adjustment, nine areas were examined in this study. The areas that the researcher reviewed and identified as obstacles to the persistence of first generation and non-first generation African American and Hispanic students at Predominantly White Institutions (PWI) were interaction with intra-racial relations, interracial relations, interaction with faculty, campus involvement, academic and non-academic facilities, usage of the cultural center, athletic facilities, involvement in the Charleston community.

Intra-racial and Inter-Racial Relations

It would seem that race and ethnicity have a fundamental impact on how college is experienced by minority students and therefore their adjustment process cannot be assumed to be the same as for White students (Smedley et al., 1993). Two of the most documented impacts on how minority students adjust on campus are the psychological and sociocultural stresses they face during their academic careers; for example, stresses that are experienced on campus or in the community (Smedley et al., 1993). These researchers explained that for some minority students, the source of college student stress may be compounded by actual or perceived weaknesses in academic preparation due to limited educational opportunities relative to their White peers' doubts about their abilities, or concerns that faculty and peers may question their legitimacy as college students. Smedley and his colleagues also mentioned that these factors (racism on campus and/or in the community, financial worries) threaten the effective adjustment for minority students, and they find it hard to concentrate on their studies and to trust faculty and administration.

Although stress has been studied for decades, more recent investigations have contributed to the understanding of the effects of race-related stress and forms of minority stressors to emotional, psychological, and physical outcomes among persons of color (Sanders-Thomas, 2002). Tierney (1992) suggested that academic and social integration for students of color might be different. The emerging research on the educational benefits of diversity is beginning to establish the theoretical and empirical links in determining the optimal conditions under which these benefits operate and how they may work differently for particular types of students (Hurtado, 2007). According to a study conducted by Chang, Astin, and

Kim (2004), it has become increasingly evident that cross-racial interaction plays a key role in achieving the educational benefits associated with racial diversity. Their study examined both the effects of cross-racial interaction and the conditions that affect it (Chang, Astin and Kim, 2004). This longitudinal data was gathered at the initial entry to college and 4 years later, and the targeted population included all institutions of higher education listed in the 1994 Opening Fall Enrollment files of the U.S. Department of Education's Integrated Post-secondary Education Data System (IPEDS). The study revealed that regardless of the type of interaction or the level of diversity, students of color are uniformly more likely to engage in cross-racial interaction than White students. Their results indicated that the interaction between racial groups in the classroom had the most robust positive effect on all students, and it added to the value of undergraduate students' social skills, intellectual capacity, and level of civic interest (Chang et al., 2004).

It is important to also address the benefits that some students can accrue from "same-race" peers and environments, including social integration and comfort, in addition to learning and democratic skills (Hurtado, 2007). A related difference in the social adjustment of minority versus White students was that, unlike White students, minority students faced racial/ethnic accountability that undermined their sense of belonging (Morley, 2007). Racial/ethnic accountability refers to how students adhere to "preconceived notions" that minority students were either not as good as White students or did not belong to White social circles (Morley, 2007). To counterbalance these harsh realities at PWIs, some students of color have developed their own subcultures within the larger communities (Griffin, Nichols, Perez II, and Tuttle, 2008). For Latinos, finding a critical mass of students who are like them appears to be very important because they have a supportive community that may have some commonalities that they can relate to with each other (Hernandez and Lopez, 2007). In a study by Hernandez (2000), the results revealed that finding a Latino community on a predominantly White campus had a positive impact on retention. This qualitative study revealed that meeting Latino students of similar backgrounds who were succeeding in college was an important motivating factor.

Interaction with Faculty

Student involvement in educationally related and distinctly academic interactions with professors appears to enhance student's academic performance (Anaya and Cole, 2001). Kuh and Hu (2001) conducted a study that examined the character and impact of student-faculty interaction on student learning and personal development in the 1990s. Using data from the College Student Experience Questionnaire (CSEQ) between 1990 and 1997, Kuh and Hu (2001) found that, compared with White students, Asian American students reported less frequent substantive interaction with faculty, African American students had more interaction with faculty than any other group of minority students, and Latino students had more contact with a faculty member related to writing improvement. Anaya and Cole (2001)

studied 836 Latino/a students using a national cross-sectional sample and found that student involvement in educationally related and distinctly academic interactions with professors appears to enhance student's academic performance. They even added that student achievement was enhanced when professors were perceived as accessible and supportive (Anaya and Cole, 2001).

When examining student-faculty interaction for minority students, concerns about the lack of same-race/ethnicity faculty sometimes hinder interaction (Lundberg and Schreiner, 2004). One of the most effective and most visible support systems for students is faculty with whom they can identify and receive strength (Owens, Reis, and Hall, 1994). Current research found that students were more comfortable with faculty members of their own race/ethnicity (Lundberg and Schreiner, 2004). Lundberg and Schreiner (2004) examined the difference in the frequency of interactions with faculty members and in satisfaction with faculty interaction based on ethnicity. The results revealed that such faculty interaction was a better predictor of learning for students of color than for White students.

Campus Involvement

Fleming (1984) conducted an extensive study and came to the conclusion that minority students perceive many traditional campus organizations as exclusive and insensitive to their social needs. DeSousa and King (1992) challenged the popular belief that Black students attending predominantly White institutions are alienated and maladjusted and, thus, they do not benefit from the college experience at levels comparable to White students. In this study, the researchers used the CSEQ to determine if African American students' level of involvement was consistent with past research. The results revealed that White students did not score higher on involvement than Black students and on all scales such as involvement with library experiences and clubs and organizations, Black and White students demonstrated comparable involvement levels. DeSousa and King (1992) did assert that Black students were more involved in organizations that were predominantly comprised of Black students compared to White students in organizations like student government, resident hall associations, etc. The researcher also noted that the students' involvement in predominantly Black organizations may provide a familiar cultural milieu for Black students and help them establish social networks and support systems not found in the classroom environment or residence halls (DeSousa and King, 1992).

Pascarella and Terenzini (2005) reviewed a large body of research that demonstrated that social interactions with peers may enhance the learning and performance of college students when these interactions are related to the achievement environment. Svanum and Bigatti (2006) conducted a study that examined social activities in terms of hours of time students devoted to student clubs, organizations and sororities and fraternities, and then assessed this in relation to other outside activities, course effort, and course grades. Their study is

significant for institutions of higher education in assisting first generation students, because the results revealed that outside activities did not directly influence course grades, but job activities negatively influenced course grades indirectly through reduced time to devote to course content. The students in the study felt their work and family demands lessened course effort which in turn lessened their GPA.

Academic and Non-academic Facilities

Kuh and Gonyea (2003) examined data from more than 300,000 students who completed the CSEQ between 1984 and 2002 and concluded that libraries play an important role in helping the institution achieve its academic mission. In their study, it was noted that students of color used the library as much or more than did other students (Kuh and Gonyea, 2003). Their findings noted that perhaps students of color find the academic library to be a safe haven, a place that supports and nurtures academic success in collaboration with peers of the same racial and ethnic background, much in the same way the campus union provides a venue for social gatherings (Kuh and Gonyea, 2003). For first generation students, participating in an honors program, joining a fraternity or sorority, employment, and teachers' instructional skills have significantly more positive effects for academic success than those first generation students that did not get involved (Pascarella and Terenzini, 2005). Not only first generation but African American students at PWI's, regardless of institutional environment, spent more time than White students utilizing campus facilities and participating in clubs and organizations (Watson and Kuh, 1996).

Residence hall communities also play a major role in establishing an environment for students' involvement in campus-related and off-campus activities during their under-graduate years (Arboleda, Wang, Shelley, and Whalen, 2003). Arboleda et al. (2003) found that students who were more involved in their living community, both academically and socially, tended to be more satisfied with their living environment and found it easier to study and collaborate academically with others in their community.

Cultural Centers

Many PWIs and Black students attending these institutions perceived the creation of Black cultural centers as providing service and programs to help Black students "better" adjust to the college environment (Goggins, 2003). Black students of the 1960s and 1970s started the majority of these centers at several institutions in order to have a safe space in which to celebrate and recreate their culture (Williamson, 1999). Although the houses started off as safe havens for students of color, many centers now function with an underlining purpose to retain students of color by creating programming, academic, and cultural enrichment. A study by Patton (2006) revealed that centers make a powerful difference in student learning because

they foster an environment that promotes leadership development, a sense of community, cultural identity, and a sense of mattering, all components for engagement in the learning process. Young (1991) stated that a properly functioning and effective ethnic minority cultural center can provide the dual service of advocating for minority students and of introducing cultural pluralism to majority students.

Athletic Facilities

The association between student participation in extracurricular activities and educational attainment has generally been found to be positive (Hanks and Eckland, 1976; Astin, 1984; Kuh and Umbach, 2004). According to Pascarella and Terenzini (2005), some evidence suggests that African American males participating in intercollegiate athletics may gain more in both academic and social self-concept than their White counterparts. They added that intercollegiate athletic participation has a positive impact on social involvement during college, satisfaction with college, interpersonal and leadership skills, and motivation to complete one's degree (Pascarella and Smart, 1991). Pascarella and Smart (1991) found that participation in intercollegiate sports can have a positive effect on degree attainment with some exceptions in Division I football and basketball.

For Division I intercollegiate athletes in the sports programs, the story can be somewhat different. Some of these student-athletes typically come from high schools with socioeconomic backgrounds different from those that of non-athletes (Pascarella and Smart, 1991; Hyatt, 2003 and Martin, 2009). Sports simply absorb so much physical and psychological energy that only a limited amount is left to make the kinds of intense investment necessary to one's academic experience (Pascarella, Truckenmiller, Nora, Terenzini, Edison, and Hagedorn, 1999). Different factors that may hinder successful social and academic integration in the student-athletes are often under enormous pressures to satisfy the goals set by the athletic departments at the institution (Hyatt, 2003) and limited time to integrate into the campus community. These problems, coupled with the students not being academically prepared, cause isolation and disassociation from campus resources and offices that could assist in balancing the dual roles (Martin, 2009).

Persistence Studies on African Americans

In *One Third of A Nation*, a report by the American Council on Education and the Education Commission of the States, predicted that by 2010 one-third of all school age children in America will represent members of ethnic minority groups (African American, American Indian, Asian American, and Hispanic), and this trend would also affect higher education institutions (Holmes, Ebbers, Robinson, and Mugenda, 2007). Several early scholars (Fleming, 1984; Sedlacek, 1987) have done extensive research on persistence of Blacks in higher education, and still today Blacks

continue to lag significantly behind Whites in college enrollment, graduation, and advanced graduate study (Bowen and Bok, 1998). The reason this research will be valuable is because most of the theoretically based studies on student persistence in higher education have predominately focused on white, traditional-age college students. Some of the prominent studies on African American students were longitudinal and very informative with regard to attrition and retention in higher education. Pascarella (1985) investigated long-term persistence during a nine-year period among minority and non-minority students. He also reported that specific dimensions of social integration into the academic and social environments were more problematic for African Americans attending public and private four-year White institutions than for their counterparts attending historically Black colleges and universities. Freeman's (1999) study noted that personal commitments, such as bonding to the institution, were highly important for students attending Black institutions and lack of social and academic integration were strong "drop out" indicators in public and private PWI's but minimally so in historically Black institutions.

Historically Black Colleges and Universities (HBCUs) previously played a significant role in educating African American students. In the 1970s and 1980s they accounted for 26.4 percent (191,158) of the 723,326 total African American undergraduate students enrolled (Nettles, Wagener, Millett, and Killenbeck, 1999). The current research on African American students is extremely important because, according to figures from the Digest of Educational Statistics, only 15.9 percent of Black students in 2000 were enrolled in historically Black colleges and universities (NCES, 2002). In spite of the decrease of number of African Americans attending Black colleges, HBCUs still continue to produce an overwhelming percentage of African American leaders (Freeman, 1999).

One of the largest studies conducted on Black students on white campuses was a twenty-year study of African American students on predominantly White campuses. Sedlacek (1987) and other researchers felt that student affairs personnel throughout the United States should be aware of the growing concerns of Blacks entering in higher education. These researchers demonstrated the validity of the following variables: positive self-confidence, realistic self-appraisal, understands and deals with racism, demonstrated community service, prefers long-range goals, availability of strong support persons, successful leadership experience and non-traditional knowledge acquired which aids in the successful persistence of African American students.

The importance of student organizations, especially cultural student organizations, to minority student retention at PWIs has also been supported in the literature (DeSousa and Kuh, 1996; Sedlacek, 1987).

Persistence Studies on Hispanic Students

The Civil Rights movement of the 1960s and increased political participation by Hispanic Americans brought national focus to the educational disparities of this population (Olivas, 1997). According to analysis conducted by the Pew Hispanic Center (2004), many Latinos who do enroll for the first time at a baccalaureate institution do not graduate. They also state the following:

- The majority of Latinos in higher education are enrolled in two-year institutions, while the majority of White, Black and Asian/Pacific Islander students are enrolled in four-year institutions.
- Latino students are less likely to complete college through the traditional path (enroll within one year of high school graduation and attain the bachelor's degree within six years).

Like African American students, the retention of Hispanic students in higher education through graduation provides a great challenge for institutions that primarily serve this population (Salinas and Llanes, 2003). According to the research from the Pew report (2004), in attainment of bachelor's degrees, disparities are evident because White youth beginning at community colleges are nearly twice as likely as Hispanic youth beginning at community colleges to complete a bachelor's degree. Even when comparing the best prepared White and Latino college students at non-selective colleges and universities, 81 percent of whites complete a bachelor's degree compared to only 57 percent of Latinos (Salinas and Llanes, 2003).

Despite the surge in enrollment, Latinos remain notably underrepresented at all levels of higher education and have one of the lowest overall educational attainment rates of any ethnic or racial group (U.S. Census Bureau, 2004). While Hispanics are under-represented in four-year institutions, they are well represented in two-year institutions, where more than 55 percent of all Hispanic students enroll (Harvey and Anderson, 2005). Some states have engaged in programmatic efforts targeting community college students and among the most recognizable and a lauded effort is the Puente Project, a collaborative partnership between the California Community Colleges and the University of California system (Saenz, 2002). The Puente Project was established in 1981 and has improved the transfer rate of students from all ethnicities. This program's purpose is to increase the number of underrepresented students who enroll in four-year institutions and earn degrees with hopes that these students return to the community as mentors.

According to Hernandez and Lopez (2007), because of the heterogeneity and the diverse experiences and distinctive histories of each Latino group in the United States, there are no "cookie-cutter" approaches to increase access and retention rates of the Latino community (p. 116). They also state it is important to recognize that Latino college student retention begins well before students enter post-secondary education (Hernandez and Lopez, 2007). This research validated findings comparable to those of African American students: (a) the importance of connecting with faculty and staff, (b) beneficial campus involvement helped students succeed,

and (c) finding a Latino community (Latino student organizations, programs, Heritage month celebrations, etc.) to assist with coping with college assisted in students getting acclimated to the university and persisting.

Involvement and First-Generation Students/minority Students

A small, but growing body of research has focused on first generation students' experiences during college and the effect these experiences have on their learning and development (Filkins and Doyle, 2002). Terenzini, Springer, Yeager, Pascarella and Nora, 1995) conducted a longitudinal study of student learning which examined pre-college characteristics and college experiences of 825 first generation college students and 1,860 traditional students at 23 diverse institutions nationwide. The results from this study noted significant differences between traditional and first generation students. The results revealed: (1) The two groups had different curricular, instructional, and co-curricular experiences, as well as different perceptions of the environments of the institutions they were attending; (2) First generation students (compared to their traditional peers) tended to take fewer courses in the "traditional fields" such as Business Administration, Computer Sciences, Education and instead took more technical and pre-professional courses; (3) First generation students reported studying fewer hours because they spent more hours working; (4) First generation students were less likely than traditional students to have positive experiences on campus. Because of their hours spent working, these students were less likely to perceive faculty members as concerned with their development and adjustment to college; (5) First generation students were less likely to report that their institutions have an environment that encouraged being critical, evaluative, and analytical; and (6) First generation students were more likely to report experiencing racial/ethnic or gender discrimination in the classroom (Terenzini et al., 1995).

Like first generation students, minority students are less likely to get involved in some of the traditional organizations like student government (Sutton and Kimbrough, 2001). Sutton and Kimbrough also state that usually, when students of color get involved, they seem to want to be associated with multicultural organizations. Minority students perceive membership within multicultural organizations will provide them greater opportunities to share their skills and talents with students from their same race (Sutton and Kimbrough, 2001). According to DeSousa and King (1992), an important next step in understanding the involvement of minority students at PWIs is to identify the specific factors that affect the quality as well as the frequency of student involvement in campus related activities.

Methodology

Eastern Illinois University is a comprehensive public university located in Charleston, Illinois, a city with a population of approximately 20,000. Ninety-eight percent of Eastern students come from Illinois, the largest percentage of them (41 percent) from Cook and adjacent counties in the Chicagoland area. In the fall semester 2009, Eastern Illinois University (EIU), minorities represent approximately 13.25 percent of the total student population: African American 992 (9.56 percent), Latino/a 324 (2.69 percent), Native American 44 (<1 percent), and Asian American 148 (1 percent). The graduation rate for each respective group varies from year-to-year with the African American and Latino/a students graduating at a lower rate than their White counterparts. In the 4 years prior to this research, the institution had increased the minority population from 10.52 percent (FY06) to 13.25 percent (FY09).

Study Design

The conceptual framework employed in this study is based on the theories of student persistence, which may, in turn, validate better retention of minority students at institutions of higher education. It is important to look at the college impact models that focus on the sources of change, such as different institutional characteristics, programs and services, student experiences, and interactions with students and faculty members (Pascarella and Terenzini, 2005) in order to increase the retention rate of minority students. The frameworks that were used in this study were Vincent Tinto's Theory of Student Departure (1987, 1993) and Alexander Astin's Theory on Student Involvement (1984, 1993). Both Tinto and Astin emphasize the importance of forging connections to individuals and groups on campus as key to student persistence. Tinto states that the greater the degree of integration into the institution's environment, the greater the student's commitment to educational goals and to his or her specific institution (Tinto, 1987, 1993, 2004). Tinto maintains that it is the interaction between institutional and educational commitments that will determine an individual's persistence behavior. Minority students may be an exception to the rule because, as these students interact throughout college, some pre-college friends perform a "bridge function" providing support and encouragement (Terenzini et al., 1995). Like Tinto, Alexander Astin also subscribes to the theory of academic and social integration. Astin's (1984, 1985, 1993) theory of student involvement occupies the middle ground between psychological and sociological explanations of student change (Pascarella and Terenzini, 2005). Astin developed one of the first college impact models. His Input-Environment-Outcome (I-E-O) model explained how college affects students related to incoming student characteristics, the campus environment and how the student leaves the campus.

Sample

Eastern Illinois University supplied a list of African American and Hispanic students who had been enrolled during FY08 and who met the criteria for this study. The criteria for selection were that the participants: had experienced at least one year of college and were currently enrolled at Eastern Illinois University during the 2008 Fall semester (FY09). The tenth day roster report from the Registrar's Office was compared with the FY08 list and the researcher discovered that of the 956-student total, 93 students had to be removed from the list because they were graduate students, provisional graduate students, or were not African American or Hispanic. This left a population of 863 students. The entire African American and Hispanic population who met the criteria were invited to complete the survey. The demographic profile of the students consisted of age, year in school, and race. Four-hundred four students completed the survey (46.8 percent response rate). Of those 404 students who participated in this research study, 71 percent (n= 288) were female and 29 percent (n= 116) were male. The race and ethnicity characteristics of the participant group were 82 percent (n=332) African American and 18 percent (n= 72) Latino/ Hispanic. The ethnicity demographics are fairly representative of the Eastern Illinois University minority population. According to the Planning and Institutional Research Office, approximately 71 percent of the minority population of the University is African American and approximately 19 percent is of Hispanic descent. Class standing of the participants reflected 13 percent (n=51) freshmen, 26 percent (n=105) sophomores, 25 percent (n=102) juniors, and 35 percent (n=140) seniors. Six (1 percent) of the students did not answer this question. The average age of the participants in the study was 20.56 years (SD=2.74). The demographic data for the generation profile showed that almost 68 percent of this group was non-first generation and 32 percent were first generation.

To determine if involvement is critical to first generation minority students bonding to the university, a questionnaire was used to assess the students' involvement on campus. The instrument used in this study was a modification of the Participation in Campus and Community Activities (PCCA) designed by Dr. Marie Norby-Loud from the University of Northern Colorado. Additional questions were added to gather appropriate data specifically from students attending Eastern Illinois University. The PCCA contains eleven questions adapted from the College Student Experiences Questionnaire (CSEQ).

Data Analysis

For the purpose of this study, descriptive statistics were used for each group (first generation, non-first generation, African American and Hispanic) to measure percentages of responses, means, and standard deviations for each of the nine dependent variables in this study. Descriptive statistics were used to help the researcher summarize and describe the data (to give a full picture of the data). For

each sample, means for the two groups (first generation versus non-first generation) were compared for each of the nine measures (use of nonacademic facilities, use of academic facilities, use of athletic facilities, experience with recognized student organizations, experience with faculty, relationships with students of the same race, relationships with students from other races, participation in university cultural centers and their participation in the community).

In addition to the descriptive statistics, the initial analysis utilized the Analysis of Variance (ANOVAS) to examine whether differences between first generation and non-first generation students are reliable and not due to random chance. This same process was used for ethnicity as well. To determine the combined effect on the experiences across the nine involvement variables, 2x2 factorial designs were used. To address research questions three and four, multiple regression equations and correlation of analyses were employed to determine how involvement in the nine areas might be predictive of how students connect to the institution and how their perceptions of their overall involvement were predictive of their likeliness to graduate. Specifically with question three, the researcher wanted to know if the different kinds of involvement were perceived predictors for connectedness to the university. Two regressions were tested to determine if there were differences between first generation and non-first generation students and African American and Hispanic students, simultaneously.

Quantitative Data Analysis

The data were examined in two sections: the frequency and nature of involvement on campus and the perceptions of connectedness to the institution. Two-by-two (ethnicity x generational status) factorial design was used to address research questions one and two simultaneously as well as to determine the possible combined effects of generational status and ethnicity on the experience across each of the nine involvement components. The third research question was to identify areas of involvement that were most predictive of students' perceived likelihood to be connected to the university, and the fourth research question was to determine whether students' perceptions of their overall involvement would be predictive of their perceived likelihood to graduate.

Research Question One

How do first generation and non-first generation participants differ in terms of their experience across the nine involvement components?

Table 7.2. Mean and Standard Errors of Involvement Measures by Generation

	First Generation M (SE)	Non-First Generation M (SE)	Mean Difference
Athletic Facilities Usage	10.94 (.556)	12.08 (.391)	1.14*
Intra-Racial Relations	17.56 (.621)	16.86 (.437)	0.7
Campus Involvement	15.04 (.675)	14.41 (.475)	0.63
Faculty Interaction	11.71 (.441)	11.13 (.311)	0.59
Academic Facilities	13.28 (.431)	12.75 (.304)	0.53
Inter-Racial Relations	15.62 (.560)	16.15 (.394)	0.53
Cultural Center Usage	6.63 (.353)	5.83 (.249)	0.47
Participating in Community	11.09 (.411)	10.90 (.289)	0.19
Non-academic Facilities	35.90 (1.75)	36.05 (.814)	0.15

*p<.05

In general, only involvement in the usage of athletic facilities was significantly different between first generation and non-first generation students, where non-first generation students reported significantly higher usage. So across the nine involvement variables used in this study, there was no difference between first generation and non-first generation students overall with the exception of one variable which was slightly significant.

Research Question Two

Is there a difference between African American and Hispanic students with their involvement in the nine involvement components?

Table 7.3. Mean and Standard Errors of Involvement Measures by Race/Ethnicity

	African American (Black) M (SE)	Hispanic M (SE)	Mean Difference
Non-academic Facilities	40.40(.601)	31.55(1.28)	8.85*
Intra-Racial Relations	20.27(.323)	14.14(.687)	6.13*
Campus Involvement	16.34(.351)	13.10(.747)	3.24*
Faculty Interaction	12.35(.230)	10.50(.489)	1.85*
Academic Facilities	13.90(.224)	12.13(.478)	1.79*
Inter-Racial Relations	15.12(.291)	16.65(.620)	1.53*
Cultural Center Usage	6.67(.184)	5.79(.391)	.88*
Participating in Community	11.38(.214)	10.61(.455)	0.77
Athletic Facilities Usage	11.73(.289)	11.29(.615)	0.44

*p<.05

In general, the main effects of ethnicity indicated significant differences between African American and Hispanic students for several of the nine areas of involvement with the African American students reporting higher levels of involvement in six of those areas. The only area where Hispanic students reported higher levels of involvement were in interracial relations. So overall, there were differences between ethnicity in levels of involvement.

Combined Effects of Generation Status and Ethnicity

The results from the two-way factorial ANOVA revealed that none of the interactions between generation status and ethnicity were significant. That is, the differences between African American and Hispanic students were consistent for first generation and non-first generation students across all of the nine involvement measures.

Research Question Three

Which areas of involvement are most predictive of students' perceived likelihood to be connected to the University for first generation and non-first generation and for African American and Hispanic student groups?

To address the third question of this research, students responded to question 64 of the PCCA survey. The researcher performed a two-way univariate ANOVA to examine the effects of generational status and ethnicity on perceived connectedness. This statistical procedure was again selected because it allowed the analyses of ethnicity and generational status, as well as the combined effects of these two student variables, and perceived connectedness. That is, it simultaneously compares the levels of connectedness between first generation and non-first generation students and African American versus Hispanic students; it also examines the difference between each generation across levels of ethnicity (i.e., African American and Hispanic students). The main effect of generation was not significant, $F(1, 400) = .0003, p = .99$; first generation ($M = 4.88, SE = .182$) and non-first generation ($M = 5.02, SE = .128$) did not differ significantly in personal assessment of their connectedness to the institution. The main effect of ethnicity on connectedness to institution was significant, $F(1, 400) = 4.92, p = .003$; African American students reported higher connectedness to institution ($M = 5.16, SE = .094$) than Hispanic students ($M = 4.74, SE = .201$). The interaction between ethnicity and generation standing was not significant, $F(1, 400) = .288, p = .59$; the difference between African American and Hispanic students was consistent across the levels of generation status.

Overall, the main effect of generation (first generation and non-first generation) did not differ significantly in personal assessment of their connectedness to the institution and the main effect of ethnicity (African American and Hispanic) on connectedness to institution was significant. After simultaneously comparing the

levels of connectedness between first generation and non-first generation students and African American and Hispanic students, the difference between African American and Hispanic students was consistent across the levels of generation status.

To address Research Question Three, multiple regression analysis was used to measure the predictive relationship between perceived connectedness to the institution and each of the nine independent variables (use of non-academic facilities, use of academic facilities, use of athletic facilities, experience with recognized student organizations, interaction with faculty, intra-racial relationships, interracial relationship, participation in the Cultural Center, and participation in the community) for each of the student groups (i.e., first generation, non-first generation, African American, Hispanic). These analyses were used to ascertain if the different categories of involvement were perceived predictors for connectedness to the university for each of the student groups.

First Generation Students

Using the Enter method, a significant model emerged for first generation students ($F_{9, 121}=9.205, p<.001$), Adjusted $R^2=.362$. Regression analyses revealed a number of important findings. The Enter method allowed the researcher to enter all of the variables at the same time. Significant variables for connectedness were: Non-academic facilities ($b = .523$), Interracial Relationships ($b = .192$), and Academic Facility usage ($b = -.216$). These results show that first generation students feel connected only through their involvement with of non-academic facilities.

Non-first Generation Students

Using the Enter method, a significant model emerged for non-first generation students ($F_{9, 263}= 16.483, p<.001$), Adjusted $R^2=.339$. Regression analyses revealed a number of important findings. Significant variables for connectedness were: Campus Involvement ($b = .224$), Participation in Community ($b = .161$), and Non-Academic Facility usage ($b = .217$). The results from this regression analysis revealed that Non-first generation students felt connected to campus through campus involvement.

African American Students

Using the Enter method, a significant model emerged for African American students ($F_{9, 322}= 20.324, p<.001$), Adjusted $R^2=.344$. Regression analyses revealed a number of important findings. Significant variables for connectedness were: Non-Academic facility ($b = .343$), Campus Involvement ($b = .194$), Participation in Community ($b = .114$); and Inter-racial Relationships ($b = .118$). The results of this

regression analyses revealed that African American students also felt connected primarily through being involved in non-academic facilities.

Hispanic Students

Using the Enter method, a significant model also emerged for Hispanic students ($F_{9, 62} = 4.06, p < .001$), Adjusted $R^2 = .280$. Regression analyses revealed only one significant predictor. The significant variable for connectedness was: Usage of Athletic facilities ($b = .281$). The results in this regression analyses revealed that Hispanic students felt it was the usage of athletic facilities, which contributed most to their perceived connectedness.

Connectedness Summary

For the outcome of connectedness, multiple regression analysis explained 36 percent of the variance of first generation students and 34 percent of the variance in the non-first generation students. For African American and Hispanic students, multiple regression analysis explained 34 percent and 28 percent of the variance, respectively. Additionally, the ANOVA model revealed no significant differences between first generation and non-first generation, but there were significant differences between African American and Hispanic students in their perception of connectedness to the institution. The regression models for each of these student groups were also different. Whereas African American students perceived greater connectedness to the university than Hispanic students, this difference between the African American and Hispanic students was not significantly different for first generation and non-first generation students. The inter-action was not significant.

Research Question Four

How are the students' perceptions of their overall involvement predictive of their perceived likelihood to graduate?

Correlation Analysis (Pearson r) was used to measure the relationship between overall involvement and the perceived likelihood to graduate for each of the student groups (i.e., first generation, non-generation, African American, Hispanic) using question 70 on the PCCA survey. Overall involvement was calculated by summing involvement scores for the nine involvement areas (i.e., use of non-academic facilities, use of academic facilities, use of athletic facilities, experience with recognized student organizations, interaction with faculty, intra-racial relationships, interracial relationship, participation in the Cultural Center, and participation in the community) for each participant.

A Pearson product-moment correlation was used to determine if the overall involvement was related to the perceived likelihood to graduate for each group (first

generation; non-first generation; African American and Hispanic students). For first generation and Latino students, the results revealed they did not perceive their overall involvement to assist with the likelihood to graduate. The relationship between perceived involvement and the likelihood to graduate was, at best, mild for non-first generation and African American students in this study.

Summary of Findings

In general there were no statistically significant findings between first generation and non-first generation students with regard to their involvement in the nine areas. More directly, even students whose parents had a college degree did not differ from those students whose parents did not graduate from college. Although many of the findings were similar for first generation and non-first generation students, some findings in this study will be beneficial for Eastern Illinois University. For instance, only 36 percent of first generation students lived on campus compared to over 55 percent non-first generation students who resided in some type of on-campus facility, and over 80 percent of the students, both first generation and non-first generation, worked more than twenty hours per week.

In addition to the ANOVA findings, the multiple regressions were used to specifically answer the question on connectedness. This method did find some statistically significant results with the independent variables. The first generation students felt connected though their involvement primarily using non-academic facilities, whereas non-first generation students felt campus involvement made them feel connected. African American students also felt connected primarily through being involved in non-academic facilities, whereas Hispanic students felt the usage of athletic facilities contributed most to their perceived connectedness to the university. While there were no significant findings between first generation and non-first generation students in this study, there were a number of findings that will support new research on generation status versus ethnicity.

This quantitative study sought to examine the perception of involvement as a critical factor for first generation and non-first generation African American and Hispanic college students. The researcher also sought to determine if students' perceptions of their involvement contributed to their connectedness to the university as well as their perceived likelihood of graduating. The researcher examined this specific population because challenges that first generation college students face, coupled with being a minority, have been noted throughout research to negatively contribute to students' educational aspirations, engagement, academic achievement, and academic integration (Giancola, Munz, and Trares, 2008; Lee, Sax, Kim, and Hagedom, 2004; Astin, 1997, 1993; Pascarella and Terenzini, 1991).

Discussion

In exploring the different types of involvement components, this study used two of the college impact models of student change as a means for understanding academic and social integration of first generation and non-first generation college students. These models were useful in understanding past research on the usage of some academic and non-academic facilities, participation in any type of clubs, organizations, and research with faculty, on-campus and off-campus employment, as well as interaction/involvement with first generation/non-first generation and ethnic minority students. Some of the findings from this study, coupled with current research, will help to clarify why some of the results were not statistically significant as well reveal the fact that some of the traditional theories of student retention and involvement may not be relevant for students of color regardless of their parents' educational background. As a consequence, the use of these models and theories created for majority students is well intentioned, yet it may not be appropriate when we add minority students to the group (Torres 2006).

The overall responses for the PCCA survey showed there were few differences in the involvement areas for first generation and non-first generation college students. Although there was a slight difference in the usage of athletic facilities with the non-first generation using these facilities more, overall there was very little variance in means between both of these groups. Therefore, regardless of whether these students' parents had a college degree or not, there were no statistical significance in their involvement areas. Perhaps the reason why there were no differences in the involvement components with these two groups is because although there were differences with their generation status, their ethnicity rendered likeness on campus.

Another possible explanation for the results in the involvement of first generation and non-first generation not being different could be similarities in some of their demographic characteristics in this study. The demographic profile showed that some of the characteristics of the first generation students, such as attending school part-time (Terenzini et al., 1995), from a lower family income level (Hernandez, 2000), and working while attending school (London, 1992), mirrored some of the characteristics of the non-first generation students in this study. In this study, over 89 percent of both first generation and non-first generation students were enrolled as full-time students; and over 61 percent of both groups worked twenty hours or more during their undergraduate experience. Perhaps with these two groups having to work more hours and attending school full-time, both groups are similar in how they perceive their availability to get involved in the college experience.

Another factor that is important to note is both groups, regardless of generation, were ethnic minority students, either African American or Hispanic. For ethnic minorities attending a PWI, their adjustment may be different (i.e., educational attainment, and lower graduation rate) than for their White counterparts (Laird,

Bridges, Holmes, Morelon, and Williams, 2004). So although they might not be the first in their families to attend college, their ability to get engaged and be involved on campus could be more similar to students who have parents with a higher education background because they are also students of color.

However, even though all the students were racial minorities, there were some differences between the African American and Hispanic groups in their involvement in the nine areas. In this study, African American students reported that they were involved in different areas (non-academic, intra-racial relations, campus involvement, faculty interaction and academic facilities) than the Hispanic students. Current research on Hispanic and African American students suggests that these two groups of students face serious challenges, but there are some differences in the challenges they face (Laird et al., 2004) like lack of engagement and culture backgrounds. The African American students were involved in more out-of-class experiences than the Hispanic students.

On the other hand, the Hispanic students in this study perceived more involvement in only one of the nine areas of involvement, which was their interracial interaction. This could have occurred because Hispanic students felt blending in with the majority population was more beneficial to them. According to stage one of Phinney's (1993) model of ethnic identity development, unexamined ethnic identity, individuals in this stage tend to accept the values and attitudes of the majority culture. This is consistent with current research on Hispanic students, because it is reported that some students feel it is important to become an integral part of the larger society (Torres, 2003). These students tended to associate with the majority culture, and they found diversity in the college environment as presenting conflicts (Torres, 2003). According to Phinney's (1993) model of ethnic identity development, the diversity could be presenting problems because, at phase two of this model, students are sometimes faced with a situation that forces them to "initiate an ethnic identity search" (Phinney, 1993, p. 69)

The main effect on generation with regard to students' perceived connectedness to campus showed that there was no significant difference between first generation and non-first generation students. Although there were no significant differences between the groups' perceived connectedness to the university, finding out if there were individual involvement variables that made them connect to the university was important. So a multiple regression model was then conducted to determine if these groups had differences in individual areas of involvement for connectedness. These areas were worth noting because they did show that there were slight differences in what these students were doing as a group to be connected to the campus in this study. For the first generation students, they perceived the usage of non-academic facilities (i.e., attending events in the union, resident halls and hanging out in the union) as playing a role in connecting them to the university. Instead of using the non-academic facilities, non-first generation students perceived campus involvement as an important variable for them. Perhaps again, the "campus community" is an important factor for this group because their parents may have been instrumental in helping them navigate and get acclimated. So overall, first

generation and non-first generation students did not differ significantly in their perceived connectedness to the university, but when each group was examined individually, they both had different variables that connected them to the university. These findings are consistent with current literature that the campus environment plays a strong role in connecting students to the university (Pascarella and Terenzini, 1991).

On the other hand, there were differences between the African Americans and Hispanic students with their connectedness to the university. Although current research shows that both African American and Hispanic students have commonalities (i.e., low-income, first generation, and family obligations) in their demographic profile, these two groups had different variables in how they interact and connect to the campus. The African American students reported more usage and/or involvement in six of the nine variables compared to the one involvement component indicated by the Hispanic students.

Perhaps the history of African American students on this particular campus plays a significant role in types of connections they have to the university. There is a stronger presence of student organizations with African American traditions on Eastern's campus for involvement (i.e., Miss Black EIU, Black Student Reunions). The African American students have multiple organizations (Black Student Union, NAACP, and National Association of Black Journalists) that have existed on the campus for more than thirty years. The Latin American Student Organization (LASO) is in its fourteenth year functioning on campus, and this currently is the only Latin American organization that exists. The Cultural Center is also used more frequently by African American students. This center could be used more by African American students because currently the center is named the Afro-American Cultural Center (the center is going through a name change that will take place after the next Board of Trustees meeting). According to Patton (2006), her research also validates that, in Black Cultural Centers, students learn about the importance of being involved on campus, about the skills for leadership, and helps develop a strong sense of identity. So perhaps, the history at this specific institution is making integration easier for African American students to engage more on the EIU campus than for the Hispanic students.

The final analysis in this study was to determine how students' perceptions of their overall involvement at the university were predictive of their likelihood to graduate. At Eastern Illinois University, the minority students' graduation rate is significantly lower than the majority students, 42 percent to 62 percent respectively. So this question was of significant interest in applying current research on involvement and understanding what this actually means for students of color and the graduation rate at Eastern Illinois University. A correlation analysis was used to determine the magnitude and direction of the association between the independent variables and the results. The results from the first generation students emerged a non-significant model. This means that the first generation student did not perceive their involvement in different areas on campus to be a predictor for graduation. There could possibly be two reasons for this result. First, first

generation students are unaware of the different involvement opportunities available on campus and therefore they feel involvement is not important for their progress toward graduation. Secondly, they might feel that academic involvement is strongly related to success in college so they do not perceive social involvement as important in assisting them in graduating.

On the other hand, the non-first generation students in this study did feel that their involvement was perceived as a predictor for their likelihood to graduate. Again, when looking at non-first generation students, we can assume that their parents have assisted them with knowledge of navigating through the college system so they are aware of the importance of involvement as a predictor for their persistence to graduation. Although the parents might know the importance of involvement, other results in this same study indicated non-first generation students' level of involvement was no different than the first generation students' involvement level. This again ties back to the research on students of color and some of the obstacles that might interfere with involvement, like alienation and the extent to which one is not comfortable and familiar with the norms and culture of the institution (Lundberg, Schreiner, Hovaguimian and Miller, 2007).

When the correlation analysis was conducted between the African American students and the involvement areas predictive of graduation, a significant result did emerge. Again, because African American students were involved in several out-of-class activities, they may perceive involvement to be helpful for graduation. African American students, regardless of the institutional type, seem to spend more time utilizing campus facilities and participating in clubs and organizations than White students (Sutton and Kimbrough, 2001; Watson and Kuh, 1996). This could be the reason these students feel participation will help with the persistence to graduation. On the other hand, with the Hispanic students, a significant result did not emerge connecting involvement to graduation. Because of the Hispanic students' lack on involvement on campus, this group perhaps did not relate involvement with graduation.

Although there were variables in this study that first generation and non-first generation students each found to be beneficial to their connectedness (usage of athletic facilities and campus involvement) to the university, the overall results revealed no statistical difference between the two student groups with connectedness. Students' whose parents had a college degree and were knowledgeable about how to navigate through higher education were no different in what they perceived to be connecting them to the university than students whose parents did not have a college degree.

While most of the findings in this study were not statistically significant, it is important not to overlook these results. The overall lack of differences in involvement and connectedness between the first generation and non-first generation may be due to the fact that these students' similarities as racial minorities on a predominantly White campus outweighed parental college background.

Implications for Practice

This study revealed no differences in the nine involvement levels between first generation and non-first generation students. However, it did identify some findings that similar four-year institutions and student affairs professionals will find relevant. For example, the number of hours these students report having to work may interfere with the time needed to engage in both on and off campus activities. Student affairs professionals could assist with finding financial resources and scholarships because working 15 hours or more is detrimental for the persistence of these students (Astin, 1984).

In this study, the results indicated that both first generation students and ethnic minority students contribute uniquely to students' involvement patterns. Institutions cannot assume that addressing the needs of first generation students will also address the needs of students of color (Lundberg et al., 2007). Institutions also need to be aware that even among students of color, it is not possible to create a "one size fits all" approach; each race/ethnic group appears to have its own unique needs (Jenkins and Walton, 2008). Student affairs professionals can work with services already existing on campus that target first generation students only and offer these services for students of color, regard-less of parental education level. TRIO Programs have been extremely successful in graduating their students (Thomas, Farrow, and Martinez, 1998) and programs that offer tutoring, study skills workshops, and even cultural enrichment will help these students. Student affairs could provide an orientation that specifically educates the students on the importance of campus life, getting involved with student organizations and how partici-pating outside of the classroom can assist the student. Currently at Eastern Illinois University, the University Foundations course (freshmen seminar) is offered, and this course should be encouraged for first generation and minority students. This 2-hour course offers topics on making connections, learning styles, mastering communication skills, building relationships, and campus activities.

Hispanic students reported higher levels of involvement in only one area in this study: interaction with students of a different race. Because their involvement was limited in this study, student affairs professionals need to encourage active participation in a full range of cocurricular activities. The current research notes that for Hispanic students, involvement in ethnic-based student organizations positively impacts retention (Hernandez and Lopez, 2007) because multicultural organizations serve as a major co-curricular experience for the majority of minority students at predominantly White campuses (Sutton and Kimbrough, 2001). Student affairs practitioners could disseminate information about the different multicultural organizations during student orientation and create more programming to include this population.

The most significant finding of this study was realizing that student affairs will need to examine what the institution is doing to assist students of color. If post-secondary institutions make a concerted and meaningful effort to affirm minority

students' cultural identities, they stand to gain increased possibilities for ensuing the latter's success in college (Tierney, 1999). Cross-cultural researchers have suggested the need to compare people of color with one another rather than, or at least along with, Anglo American culture (Julian, McKenry, and McKelvey, 1994). The aforementioned findings can be useful to Eastern Illinois University as well as institutions that have similar demographics. Existing studies that have examined the role of race and first generation status have put all non-White racial groups into one category, which overlooks distinctions among non-White racial and ethnic groups (Lundberg, Schreiner, Hovaguimian, and Miller, 2007). Most of the past literature groups underrepresented (first generation, low-income, ethnic minority) students together. Perhaps we have been treating all groups as one and more research should focus on each individual group separately.

This study identified numerous challenges for first generation and non-first generation ethnic minority students that warrant examination. With threats of the elimination of grants and financial aid, more students in college are finding themselves working full-time and attending college. The students in this study were those who persisted through their freshmen year of college, so looking at ways to engage second-year students and beyond would be beneficial. If these students are not getting engaged, the likelihood of graduation is slim.

Current research indicates that experiences of first generation and ethnic minority student who attend Predominantly White Institutions (PWIs) complicate the college adjustment process and negatively affect student engagement, both inside and outside the classroom (Hawkins and Larabee, 2009). However, there is a lack of research that examines the differences or similarities comparing first generation and non-first generation students separately from ethnic minorities. This study showed that even when minority students had parents with an educational background, they were not at an advantage over first generation students when navigating through higher education. Perhaps race and ethnicity outweighs generation on campus and more research is needed to re-examine these groups.

Pascarella and Terenzini (1991) contend that although structural and environmental characteristics of an institution shape students' social interaction and behavioral attitudes, it is the perceived environment that has the greatest influence on whether students of color have satisfying and rewarding social and academic experiences in college. It is up to institutions and student affairs divisions to address and transform the chilly and unwelcoming campus climates for students of color because environments can create climates that are debilitating to the success of these students (Steele, 2000). The time minority students spend developing a sense of community using of academic and non-academic facilities, the greater chance these students have to be engaged into the fabric of the institution. It is imperative that administrators' research minority student experiences on campus through data collection, which could provide information on possible cultural characteristic that affect educational outcomes for these specific ethnic groups.

Until persistence to graduation increases for first generation and/or minority students, research on the retention of these students will continue to be a concern

for higher education. Higher education institutions' "unwritten expectations" need to be a clear, explicit articulation for non-dominant groups unfamiliar with the academic culture at an institution (Schwartz, Donovan, and Guido-DiBrito, 2009). The need for additional research at multiple institutions will not only open the door for "new best practices" but new research will be able to create programming, support and initiatives to assist both first generation and minority students. As we continue to provide greater insight into cross-cultural research-retention for racial/ethnic issues students, we will soon be able to shed some light on helping these populations obtain their baccalaureate degree!

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