ABSTRACT

Title of thesis: THE RELATIONSHIP OF PERCEPTIONS OF CAMPUS CLIMATE AND SOCIAL SUPPORT TO ADJUSTMENT TO COLLEGE FOR LATINA SORORITY AND NON-SORORITY MEMBERS

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The purpose of this study was to explore whether there were differences in adjustment to college for Latina college students who are members of a Latina sorority and those who are non-members. A second purpose was to examine whether perceptions of campus climate and social support predicted academic, social, personal emotional, goal commitment-institutional, and overall adjustment to college. Using a web-based survey, the University Environment Scale (Gloria & Kurpius, 1996), social support scales (Schneider & Ward, 2003), and Student Adaptation to College Questionnaire (Baker & Siryk, 1984) were used to collect data. Respondents included 314 Latina college students (183 members, 131 non-members) from a variety of institutions nationwide. Latina sorority members had significantly higher levels of social adjustment and goal commitment-institutional adjustment than non-members. Additionally, perceptions of campus climate and social support were significant predictors of adjustment for both groups, with 21%-64% variance explained for each form of adjustment.

THE RELATIONSHIP OF PERCEPTIONS OF CAMPUS CLIMATE
AND SOCIAL SUPPORT TO ADJUSTMENT TO COLLEGE
FOR LATINA SORORITY AND NON-SORORITY MEMBERS

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ACKNOWLEDGMENTS

There are so many people that I want to give "shout outs" to for their unconditional support through this roller coaster called a thesis.

- To Dr. Marylu McEwen for her willingness to guide me through this amazing process. Thanks for helping me to grow as a researcher and practitioner. Although it was painful, I have learned so much from you.

- To Dr. Karen Inkelas for her expertise in research methods and statistics. Thank you for your knowledge and humor in the classroom. You have an amazing way of making research methods fun for all. Thank you for teaching me eight syllable words like multicollinearity.

- To Dr. John Zacker for advising me through my two years at the University of Maryland. Thank you for challenging me in the early stages of my research and thank you for agreeing to sit on my thesis committee.

- To my writing support group Tiki Ayiku, Paul Eaton, Josh Hiscock, Marcus Peanort, and Yen Ling Shek (Ayiku et al., 2004). "We must fill the beeker!!"

- To Yen Ling Shek for listening to all my thesis complaints, calming my nerves when I needed it most, and spending endless hours with me typing. Thanks for finding the VIF citation. You're the best!! You truly are my partner-in-crime!!

- To my Wednesday writing buddy and friend Jeffrey Pegram. Thanks for being a part of this process.

- To my editors Yesenia Flores and Paul Eaton for providing me with constructive feedback on my first draft of chapters 1-3.

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CHAPTER ONE

INTRODUCTION

If administrators and faculty members took a brief moment to listen to the

concerns of the fastest growing minority group in higher education, they would be likely

to hear the orations of students facing what Rendon (2003) labeled as issues of

separation, isolation, identity development, discrimination, gender role conflicts,

language barriers, and cultural stereotyping. These are just a few of the issues currently

being addressed by researchers and scholars interested in the success of Latino students

in higher education. This chapter serves as a foundation from which to develop the

current study on Latino students. It begins with an identification of the issues many

Latino students face as they transition into college followed by an overview of some of

their struggles with alienation and perceptions of campus racial climate. A brief review of

Latino student persistence will also be included since successful transition may ultimately

affect retention. As an introduction to the population chosen for this study, background

information on Latinas and Latina sorority membership will also be provided. The

purpose of the study will then be discussed followed by a list of terminology used and the

significance of the study.

Background to the Problem

Adjustment and Transition

As students enter the university, they are initially faced with the task of

transitioning into a new environment, regardless of their academic goals or class level at

the time of entry. Schlossberg (1981) suggested that each individual responds to

transition differently, depending on personal characteristics and external factors present.

Depending on the individual's response to transition, successful adaptation may or may not occur (Schlossberg). Baker and Siryk (1984) argued that for college students, adaptation and adjustment is a multifaceted task that many students struggle with. Researchers have posited that Latino students, in particular, often struggle with the task of transitioning and adjusting to college (Hurtado, Carter, & Spuler, 1996; LeSure, 1994; Schneider & Ward, 2003; Smedley, Myers, & Harrel, 1993).

Some of the current literature addressing the needs and experiences of Latino college students has exposed practitioners to the difficulties that this population may face upon entrance to the university. For example, the following personal stories from two publications reflect the tribulations that three Latina students encountered as they transitioned to college. Veronica Orozco (2003), a first-generation Mexican American, recalled the difficulties she faced in transitioning from a high school with a predominantly Latino population to the University of California, Irvine (UCI) which has a population of approximately 11% Latino students. Because of her previous experience, she perceived the ethnic minority population at UCI to be small. During her first year, Orozco was on the verge of dropping out because she lacked a sense of belonging to campus and was struggling academically. Her adjustment issues were multiplied because her family, as supportive as they were, lacked knowledge of the college experience and were limited in their ability to provide positive affirmations. In thinking about her transition, Liliana Mina (2004), a first-generation Colombian immigrant, told the story of her hardships and loneliness as she found herself surrounded by people who did not look or think like her. In her new college environment away from family and friends, Mina found herself struggling with issues of isolation. Cynthia Juarez (2004), the daughter of

first-generation Mexican American parents, recalled her first year at the University of Texas, El Paso, where weeks often passed without her speaking because she was timid and lacked the ability to verbalize her opinion. Juarez lacked connection to the university and immediately fled home after classes. As highlighted by these personal stories, Latino students may face a number of issues in transitioning to college, many of which are connected to feelings of alienation and loneliness in their new environment.

Despite attempts to fulfill the needs of diverse student populations, higher education administrators may be falling short in the eyes of some Latino students. Some students continue to express concern about unwelcoming racial climates and the lack of tolerance on campus. As reported in *The Chronicle Review*, Latino students often experience culture shock, feelings of isolation, and a sense of inadequacy on campus ("Educating the Largest Minority Group," 2004). Ortiz (2004) suggested that Latino students may experience racism on campus because they are phenotypically different, often speak with an accent, and may be from a low socioeconomic background. Furthermore, she purported that students and administrators are oblivious to the overt and covert forms of racism that occur in residence halls, classrooms, and advisors' offices (Ortiz). Chilly campus racial climates subject Latino students to alienation and increased experiences with powerlessness, normlessness, and social isolation (Gloria & Castellanos, 2003). As a result, these students feel marginalized which, argued by Tinto (1993), directly and indirectly impacts their ability to academically and socially integrate into the university and persist to graduation.

Latino College Students

Institutions of higher education should be concerned with Latino students' ability to adjust to campus and cope with feelings of alienation because they ultimately correlate with retention rates (Hurtado & Kamimura, 2003). As the Latino college student population increases, issues of persistence and retention are an ongoing concern for researchers and practitioners. As defined by Castellanos and Jones (2003) persistence is the ability to remain in college, matriculate, and complete a degree. Unfortunately, only 6% of all Latino students enrolled in college earn an associate degree, while only 4% earn a bachelor's degree (Castellanos & Jones). Latinos are reported to be the least-educated major racial or ethnic group with only 11% of those over the age of 25 possessing a baccalaureate degree (Schmidt, 2003a). The Inter-University Program for Latino Research reported that Latino students are less likely than White students to progress to upper-division courses and less likely to complete their degree when they do successfully progress to the third year (Schmidt). Despite research and suggestions made for increasing the retention rates of Latino students, there are still large discrepancies between those who enroll and those who graduate (Longerbeam, Sedlacek, & Alatorre, 2004).

Although transition and persistence issues impede both male and female Latino college students, it has been reported that Latinas have made more progress than their male counterparts in the areas of enrollment and degree completion (Schmidt, 2003a). In the past 20 years, the college participation rate of Latinas between the ages of 18 and 24 has increased from approximately 16% to 25% (Gonzalez, Jovel, & Stoner, 2004). Their male counterparts in the same age range over the same period of time only increased their

college participation rate by 3.3% (Gonzalez et al.). In addition to increased participation rates, the degree completion rates for Latina students have also increased over the past 10 years (Gonzalez et al.).

Despite these increases, however, Latinas are continually met with a number of challenges and obstacles in pursuit of their educational goals. These obstacles include familial resistance some Latinas encounter as they pursue academic endeavors as well as isolation they may experience once they enter college (Gonzalez et al., 2004). Upon entrance to the university, many Latina students are faced with new challenges as they find themselves negotiating their culturally prescribed gender roles and their new found independence (Gonzalez et al; Olivas, 1996; Orozco, 2003). Additionally, many Latina students struggle because they lack role models on campus (Mina et al., 2004; Ortiz, 2004). As reported by Dolan (2004), there is a lack of women in tenure and tenure-track faculty positions and even fewer women of color in these positions. Gonzalez et al. proposed that Latinas experience college in a unique way, suggesting that they struggle with the ambivalence of maintaining cultural values and familial commitments while searching for individuality and independence in an unfamiliar, predominantly White academic world. This unique experience explicates the need for continual research on this growing population of college students in order to better understand their unique experience.

Latino Greek-letter Organizations

A number of studies have been conducted on traditional Greek-letter organizations, highlighting both the positive and negative effects of membership on a number of desired outcomes. These outcomes have included cognitive development,

academic achievement, social integration, moral and ethical development, and persistence (Astin, 1993; Pascarella, Flowers, & Whitt, 2001; Pike, 2000; Wilder, McKeegan, Midkiff Jr., Skelton, & Dunkerly, 1997). Few studies, however, have been conducted on the outcomes of membership in ethnic-based Greek-letter organizations including Black Greek-letter organizations (BGLO), Latino Greek-letter organizations (LGLO), and multicultural Greek-letter organizations. It remains unclear whether or not ethnic-based Greek-letter organizations promote similar outcomes as those influenced by membership in a mainstream Greek-letter organization.

Recent literature has suggested that membership in an ethnic-based Greek organization promotes a number of positive outcomes for ethnic minority students. In a personal testimony, Veronica Orozco (2003) proclaimed that membership in a Latina sorority was the most important form of social support she received in college that further cultivated her transition. Cabrales and Rodriguez-Vasquez (2004) also attributed involvement in a cultural fraternity for facilitating their persistence. After interviewing members at Arizona State University, Wingett (2004) concluded that ethnic-based Greek organizations provide Students of Color with a support group on campus, foster their academic development, and contribute to their persistence. In a recent study conducted at a university in the Northwest, Olivas (1996) concluded that Latina students on campus formed a Latina sorority in order to combat institutional racism and feelings of isolation. Furthermore, these women found family and a form of social support in the sorority (Olivas).

Purpose of the Study

The purpose of this study was to explore whether there is a difference in levels of adjustment to college for Latina students who are members of a Latina sorority and those who are not members. Additionally, the purpose of this study was to determine if there is a relationship between perceptions of campus climate, perceptions of social support, and adjustment to college for Latina students who are members of a Latina sorority and those who are not members. Specifically, the study examined whether perceptions of the university environment, family support, general peer support, Latino peer support, faculty support, and institutional support explain a significant amount of the variance in academic adjustment, social adjustment, personal-emotional adjustment, goal commitment-institutional adjustment, and overall adjustment for members of a Latina sorority and those who are not members. Based on the stated purposes, the following research questions were proposed:

1. Is there a difference in adjustment to college for Latina students who are members of a Latina sorority and those who are not members?

2. Is there a relationship between perceptions of campus climate, perceptions of social support, and adjustment to college for Latina college students who are members of a Latina sorority?

3. Is there a relationship between perceptions of campus climate, perceptions of social support, and adjustment to college for Latina college students who are not members of a Latina sorority?

Definition of Terms

In order to understand the researcher's perspective while conducting this study, several terms are defined by the researcher below:

Latino

The term "Latino" was used throughout this study as an umbrella term for individuals who descended from the Latin American, Central American, South American, or Caribbean region. This includes people who trace their roots to a variety of countries in each region including Mexico, Puerto Rico, El Salvador, and Columbia. The researcher used the term "Latino" as a matter of personal preference while recognizing that people self identify in a variety of ways, depending on their own preferences. The researcher also recognized that one umbrella term cannot accurately depict the heterogeneity within a group of people connected by common history, language, culture, and tradition (Torres, 2004).

The terms "Latino," Hispanic," "Mexican," and "Chicano" were most commonly used throughout the literature included in the current study. In order to maintain authenticity of presented research, the term employed by cited authors was used when referencing their individual studies. As described by Torres (2004) research literature often uses broad terms such as "Latino" and "Hispanic" in order to be inclusive, however, the experiences described are often those of Mexican Americans. According to Schmidt (2003b), debate continues over the use of both terms, however, a growing number of people on college campuses have a preference for the term "Latino."

Throughout the current study, the term "Latino" was meant to be inclusive of both men and women while the use of the term "Latina" was used when specifically referencing women of Latino descent.

Transition

In the present study, the term "transition" was used as a description for incoming college students entering a four-year university. The term "transition" was inclusive of those students who entered a four-year university from high school, community college, another institution, or from a career. According to Schlossberg (1981), transition can be viewed as either a major or subtle life change which causes a shift in personal assumptions, perceptions, and behavior. A person's perception of the change, as opposed to the change itself, affects her ability to adapt to the transition (Schlossberg). Adaptation is a positive outcome of transition which is influenced by personal perceptions, the transition environment, and individual characteristics (Schlossberg).

Adjustment

Throughout the current study, the term "adjustment" was used interchangeably with the word "adaptation" to infer successful transition to college. According to Schlossberg (1981), adaptation occurs when an individual is able to integrate transition into her life. Zea, Jarama, and Bianchi (1995) defined successful adaptation to college as "being socially integrated with other students, participating in campus activities, responding to academic requirements, and being attached and committed to the educational institution" (p. 511). College adjustment, as defined by Hurtado, Carter, and Spuler (1996), involves the resolution of psychological distress and transitional trauma. In the present study, adjustment was determined by Baker and Siryk's (1984) Student

Adaptation to College Questionnaire (SACQ) which defines adjustment based on four subscales including academic, social, personal-emotional, and goal commitment-institutional adjustment.

Campus Climate

The term "campus climate" was applied to describe perceptions, either positive or negative, that students have about their college or university's response to race, ethnicity, and diversity on campus. Campus climate is usually the result of values, cultures, and traditions espoused by the campus community including faculty, staff, and students. As defined by Orozco (2003), campus climate consists of the academic, social, and interpersonal comfort level of racial and ethnic minority students on campus. In the present study, perceptions of campus climate were determined by the University Environment Scale developed by Gloria and Kurpius (1996) .

Alienation

As noted by Gloria and Kurpius (1996), the values espoused by the campus community may be similar or different from those values, cultures, and traditions held by the students on campus. "Alienation" is often the result of negative perceptions of the campus racial climate held by ethnic minority students on campuses that espouse different ethnic or cultural values than their own. Cabrera and Nora (1994) described alienation as a three-stage process in which the presence of intolerance towards ethnic minority students on campus leads to their personal perceptions of prejudice and discrimination on campus followed by an increased sense of separation from the campus. Loo and Rolison (1986) used the term "alienation" to describe sociocultural factors and perceptions students have as opposed to quantifiable measures such as GPA. In the

present study, alienation on campus was not specifically measured but was explored in relation to perceptions of campus climate.

Latino Greek-Letter Organization (LGLO)

The terms "Latino Greek-letter organization (LGLO)," "Latina sorority," and "Latino fraternity" were used to reference Greek letter sororities and fraternities that were traditionally founded with the purpose of serving Latino college students. These organizations are not typically considered a part of mainstream umbrella groups such as the North-American Interfraternity Conference or the National Panhellenic Conference. Some LGLOs, however, have joined the National Association of Latino Fraternal Organizations (NALFO), a group developed in 1998 with the purpose of governing and uniting LGLOs (Kimbrough, 2003). Additionally, these organizations are sometimes referred to as "hermandades," the Spanish term for sisterhood or brotherhood.

Significance of the Study

As Latino students continue to penetrate the ivory towers of higher education, there will be an increasing demand for studies focusing on their specific needs and experiences. As suggested by Kimbrough (2003) and Castellanos and Jones (2003), the number of Latinos attending college tripled between 1976 and 1995. Schmidt (2003a) estimated that 1.5 million Latinos are now enrolled in higher education. Although this increase reflects growth, Latino students only encompass 6.6% of the total enrollment at four-year institutions (Schmidt).

The Pew Hispanic Center revealed that although Latino students are entering college at lofty rates, they are less likely than White students and other Students of Color to graduate from a four-year institution (Rooney, 2002). Research focusing on the

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retention demands of Latino students, therefore, is an important consideration for student affairs professionals. Increased knowledge of the Latino student experience will better equip practitioners to develop academic and social programs affecting the retention and success of Latino students (Castellanos & Jones, 2003). Although a number of factors have been suggested to affect student retention, the focus of this study was on adjustment, a variable suggested by Tinto (1993) to impact retention.

The focus of this research is also significant since previous studies examining Latino students' adjustment to college have culminated in inconsistent conclusions. For example, Solberg, Valdez, and Villareal (1994) concluded that cultural pride, as defined by ethnic self-identification, ethnic pride, language preference, and personal rating of cultural pride, was not related to adjustment while Schneider and Ward (2003) found that ethnic identification was positively correlated with adjustment for Latino students. Studies focusing on the transitional needs of Latino students is also warranted since many Latino students continue to report adjustment concerns related to cultural incongruity, racism, and discrimination (Hurtado et al., 1996; LeSure, 1994). Additionally, several studies have focused on transition and adjustment in relation to social support and stress whereas the current study did not include stress as a variable since few factors have ultimately been determined to mitigate the stress associated with adjustment (N. Rodriguez, Mira, Myers, Morris, & Cardoza, 2003; Solberg et al., 1994).

Although it is suggested that male Latino students are facing more barriers to higher education that their female counterparts (Gonzalez et al., 2004), focusing this study on Latina students was important for several reasons. First, Latina students are often neglected in higher education research and literature (A. L. Rodriguez, Guido-

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DiBrito, Torres, & Talbot, 2000). As their participation in higher education increases (Gonzalez et al.) student affairs administrators will increasingly need resources and literature addressing this specific population. A. L. Rodriguez et al. suggested that universities are struggling to effectively serve Latina students because of cultural stereotyping and the perpetuation of a "cultural deficit" model which implies that Latina identification is a disadvantage. It is also important to examine Latina students separately from their male counterparts because Latinas are more likely to experience gender-role stereotyping and familial obligations when they enter college, which could ultimately affect their success (A. L. Rodriguez et al.). Latina students also experience ambivalence as a result of coexisting in a culture which values family and interdependence and the world of academia which values individuality and independence (Gonzalez et al.). Increased research on this population may assist institutions of higher education to address the unique needs and experiences of Latina college students.

This study is also significant to practitioners because it focuses on members of a Latina sorority, a specific population which has been neglected in the literature. Few studies have looked at the relationship of involvement in ethnic student organizations for Latino students and even fewer have focused on the increasing trend of founding, joining, and participating in Latino Greek-letter organizations. As suggested by Kimbrough (2003) the Latino Greek movement exploded in the mid-1970s and since then, higher education has seen the creation of over 75 LGLOs. Jeffrey Vargas of the National Association of Latino Fraternal Organizations (NALFO) predicted that approximately 30,000 Latinos are either current members or graduates of LGLOs (Helem, 2004). As suggested by Helem, Latino students are compelled to join LGLOs because they foster a

student's sense of belonging on campus and provide moral support. Since the explosion of the Latino Greek movement, few researchers have given adequate attention to this phenomenon; therefore, additional research on Latino fraternal organizations is warranted.

Chapter Summary

By focusing on Latina student transition and adjustment to college, the researcher sought to contribute to the existing literature surrounding Latino students in higher education. Specifically, the researcher focused on various forms of support available to Latino students as they transition to college as well as the role that campus alienation and cultural congruity play on adjustment. Additionally, the researcher focused on Latina sorority membership in order to learn more about its relationship with adjustment, social support, and perceptions of campus climate. The next chapter will focus on these topics further. This research is beneficial because it focused on a growing population, Latina college students, as well as a current trend, membership in a Latina sorority. The hope was that this study would provide student affairs practitioners with current information on the issues facing this understudied population as well as provide suggestions for helping Latina students successfully adjust to college. The next chapter is an in-depth review of the current research available on these topics. It will serve as a foundation from which to develop the present study.

CHAPTER TWO

REVIEW OF THE LITERATURE

This review is an integrative summary of the current literature and research

pertaining to Latino college students and their transition, adjustment, and adaptation to

college. A number of variables have been suggested to affect their transition and

adjustment to college including psychological stress factors, systems of social support,

and institutional characteristics. Subsequently, each of these variables will be examined

in this review. Campus climate, alienation, and their combined effect on the adjustment

of Latino students will also be evaluated. A brief exploration of the literature pertaining

to Latino student persistence will be included since it has been implied that adjustment

and alienation ultimately affect retention. In order to highlight the population to be

examined, specific issues pertaining to Latina college students will be discussed

followed by research on Latina Greek-letter organizations and their role in aiding Latinas

in their transition and adjustment to college. This integrative summary includes a

description, critical analysis, and comparison of the current literature. Major themes and

gaps in the literature are highlighted.

Transition and Adjustment

Schlossberg's Model of Transition

Throughout this literature review, the use of the term adjustment is similar to that

of the term transition. In its descriptive nature, Schlossberg's (1981) model can be used to

highlight the complexity of transition. In her quest to discover why experiences with

change differ from person to person depending on the timing, setting, and type of change,

Schlossberg proposed a model of transition for adults in which three major factors

interact, leading to either a successful adaptation to change or a failed attempt to adapt.

According to the model, the first factor of influence is the characteristic of the transition

including role change, affect, source, timing, onset, duration, and degree of stress

(Schlossberg). The second factor is determined by the pre-transition and post-transition

environment including internal support systems in place, institutional support, and the

physical setting involved (Schlossberg). The third major variable in Schlossberg's

transition model considers the characteristics of the individual involved including

psychosocial competence, sex, age, state of health, race/ethnicity, socioeconomic status,

personal values, and previous experience with transition.

At the time of its development, Schlossberg's (1981) model was exploratory,

subject to change, and intended to be tested further. Although Schlossberg's model is

broad and has not been specifically tested on Latino college students, the factors

suggested to affect transition can be used as a foundation from which to develop the

current study. Additionally, a number of these factors have been tested by scholars

studying Latino student transition, adaptation, and adjustment to college. For example,

psychological stress, a characteristic of transition according to Schlossberg, may affect

Latino students' ability to adapt (Quintana, Vogel, & Ybarra, 1991). Systems of support

and institutional characteristics, elements of the pre-transition and post-transition

environment according to Schlossberg, are also important factors to consider when

examining the transition and adjustment to college for Latino students (Quintana et al.;

Schneider & Ward, 2003, Zea et al., 1995). The next section will highlight adjustment to

college, as defined by Baker and Siryk (1984), followed by a review of research on

psychological stress factors, social support factors, and institutional support factors affecting student adjustment to college.

Adjustment to College

Baker and Siryk's (1984) empirical study is used to gain a deeper understanding of the term adjustment as it pertains to the present research. Baker and Siryk believed that adjustment to college is multifaceted and demanding and alleged that levels of adjustment are based on coping mechanisms which vary from student to student. They created a 52-item self-report scale designed to measure multiple aspects of adjustment to college in hopes that the instrument would be used as a measure of environmental and personality determinants on adjustment as well as a diagnostic tool for identifying students who are struggling with adjustment issues (Baker & Siryk). They believed it was an important tool of intervention since students having difficulty adjusting were reportedly less likely to participate in other aspects of college and more likely to depart prematurely (Baker & Siryk). At the time of its development, existing instruments only assessed certain aspects of adjustment such as social adjustment, academic adjustment, or personal-emotional adjustment, therefore, Baker and Siryk attempted to develop a scale to measure all aspects simultaneously.

Baker and Siryk (1984) conducted a three year study at an urban, residential university in the northeast. Over the three year period, the authors distributed the scale to 300 first-year students twice per year, once during the fifth week of the first semester and again during the fifth week of the second semester. The response rate of students returning either the first semester or second semester questionnaire was 247 the first year, 244 the second year, and 243 the third year. The students were asked a series of questions

pertaining to four types of adjustment including academic, social, personal-emotional, and a general adjustment (Baker & Siryk).

By administering the scale six different times, Baker and Siryk (1984) determined reliability and validity of the scores. Baker and Siryk derived full scale Cronbach's alphas of .94 for the scores on three of the six study administrations, .93 for two, and .92 for the last. The four subscale Cronbach's alpha coefficients ranged from .82 to .89; therefore, Baker and Siryk concluded that the scales were internally consistent with a coefficient of .80 or above. Validity scores were determined by testing how likely the scales were to predict attrition, appeals for psychological services, freshman year grade point average, election to an academic honor society, application for residence hall positions, and participation in social activities on campus (Baker & Siryk). Attrition was found to have a consistently significant negative relationship with the general adjustment subscale, indicating that higher scores on the subscale resulted in lower levels of attrition (Baker & Siryk). The social adjustment scale followed closely behind in magnitude of the negative relationship, although fewer sample administrations resulted in significant results. The most relevant subscale for verifying validity in predicting freshman year grade point average was the academic subscale with a positive correlation, indicating that higher academic adjustment resulted in a higher grade point average (Baker & Siryk). The academic subscale was also positively correlated with election to Phi Beta Kappa, indicating that higher levels of academic adjustment were related with an election to an academic honor society (Baker & Siryk). Overall, the authors were confident that the instrument could be used as an intervention measure for a range of adjustment issues.

Since its development, the instrument has been used in a number of studies, many of which are discussed in this review.

Psychological Stress Factors

From a psychological perspective, researchers have examined various stress factors that affect college transition and adjustment including academic difficulties, social isolation, and psychological distress. Stress is an important factor to consider since Schlossberg (1981) recommended that change and transition, whether positive or negative, can result in various levels of stress. In a meta-analytic review of 44 studies investigating Latino students' psychological adjustment to college, Quintana, Vogel, and Ybarra (1991) concluded that Latino college students experience higher levels of stress related to adjustment than Anglo students, making stress an important variable to consider in this review.

As posited by Solberg, Valdez, and Villareal (1994), a diathesis-stress model can be used to examine the mental health of Latinos in relation to stress and personal characteristics. "The diathesis-stress models posit that mental health functions as an interaction between the amount of stress a person experiences and individual characteristics" (Solberg et al., 1994, p. 231). Solberg, Hale, Villareal, and Kavanagh (1993) proposed a diathesis-stress model can also be used to examine the adjustment to college for Hispanic students. Using a sample of 164 Mexican American and Latino American students at a midsize institution on the west coast, the Solberg et al. (1993) developed and validated a 21-item inventory for measuring stress factors that affect Latino college students in transition. The authors found evidence to support the development of three subscales measuring academic stress, social stress, and financial

stress, determining that these factors be considered more closely in research (Solberg et al., 1993). It should be noted, however, that the 21-item inventory was validated using a sample consisting of 74% female respondents. Although Solberg et al. (1993) did not examine gender differences, stress may affect men and women differently, which ultimately could impact their ability to generalize the findings.

The development of a stress inventory for Hispanic college students prompted researchers to explore academic, social, and financial support and their influence on Latino student adjustment. Solberg et al. (1994) attempted to test the diathesis-stress model by examining the relationship between stress, acculturation, social support, and adjustment. Using a sample of 394 Mexican American and Latino American first- and second-year students at a public institution on the west coast, Solberg et al. used hierarchical regression to determine if adjustment was related to cultural pride, social support, stress, and the interaction between social support and stress. The authors found that higher perceived levels of social support were related to higher levels of adjustment. Solberg et al. also found that cultural pride, as a measure of acculturation, was not directly related to college adjustment although social support, academic stress, and social stress were directly correlated with adjustment. The authors, however, failed to confirm their hypothesis that social support would alleviate the relationship between stress and adjustment (Solberg et al.). Their prediction was that since stress accounted for 40% of the variance in adjustment, it would be difficult for any one measure to alleviate this effect (Solberg et al.). It should be noted that the authors measured social support using the Social Provisions Scale, an instrument which examines six variables including attachment, social integration, reassurance of worth, reliable alliance, guidance, and

opportunity for nurturance. This is an important distinction since there are several different instruments available that measure levels of social support. If Solberg et al. had chosen a different instrument, the results may have varied. Additionally, the authors did not assess or distinguish between sources of support such as family and peers.

In an attempt to further examine the role that perceived social support plays in the psychological well-being and distress of Latino college students, Rodriguez, Mira, Myers, Morris, and Cardoza (2003) built on Solberg et al.'s (1994) study by distinguishing between family and friend support in order to determine which had a greater effect. Using a sample of 338 Mexican American and Central American students at a predominantly Latino institution, the authors used hierarchical regression to determine whether familial support or friend support had a larger influence on psychological distress and well-being. A number of instruments were used to measure various types of stress including general college stress, stress related to acculturation, and minority-status stress. N. Rodriguez et al. concluded that although both family and friend support enhances the well-being of Latino college students, these students more readily relied on friend support to alleviate psychological distress associated with college. This may be due to the fact that college peers can relate more to college related stress than family members (N. Rodriguez et al.). The authors also found that neither family or friend support mediated the effects of stress experienced during psychological adjustment (N. Rodriguez et al.). From these findings, the authors concluded that family and friends may in fact serve as protectors but are not able to completely buffer the effects of college related stress (N. Rodriguez et al.). These findings paralleled those of Solberg et al. This study was unique in that it was conducted at an institution with a large Latino population.

The demographic characteristics of the institution could have potentially affected the level of college related stress experienced, although evidence of this was not noted by the authors.

Varying degrees of stress have also been attributed to students' level of ethnic identification, minority status, and campus racial climate. In a meta-analytic review of six studies investigating the relationship of stress and social isolation on campus, Quintana et al. (1991) concluded that high levels of social isolation and stress were related to high levels of discrimination and alienation experienced on campus. Quintana et al. also found that Latino students with high levels of cultural affiliation, or ethnic identification, were less comfortable with mainstream culture and therefore experienced higher levels of stress and increased difficulties with adjustment.

Smedley, Myers, and Harrel (1993) proposed that although a majority of students face difficulties adjusting to college as a result of student role strain and general life events, ethnic minority students often experience additional stress as a result of their minority group membership. These types of stresses, labeled minority-status stresses, were hypothesized to confer additional risks to adjustment on ethnic minority students (Smedley et al.). The authors proposed a multidimensional stress-coping model which identified three sets of factors that potentially affect minority students' adjustment including individual attributes, psychological and socio-cultural factors, and coping strategies. Drawing from a sample of 91 ethnic minority students attending a predominantly White institution, the authors used hierarchical regression to investigate the relationship of student role strain, general life events, and minority-status stresses

with adjustment. The three measures of adjustment included feelings of general well-being, levels of psychological distress, and academic achievement.

Smedley et al. (1993) found that student role strain contributed 14% of the variance in the general well-being of ethnic minority students. General life events and minority-status stresses, however, were not significantly related to ethnic minority students' general well-being (Smedley et al.). Student role strain, general life events, and minority-status stresses each contributed to higher levels of psychological distress for minority students (Smedley et al.). In regard to the third measure of adjustment, only minority status-stresses were significantly correlated with academic achievement (Smedley et al.). These findings indicate that ethnic minority students have trouble coping with psychological distress and academic adjustment as a result of their ethnic minority group membership. Ethnic minority status on campus, however, was not a significant indicator of general well-being.

As argued by Smedley et al. (1993) minority-status stresses may include within and between group conflict, psychological vulnerability to campus racial climate, and saliency of racism and discrimination. These findings implied the need for additional research examining specific ethnic minority-status stress factors affecting adjustment to college. Limitations, however, should be noted. Since the sample sizes of individual ethnic groups including Chicano, Black, Latino, and Pilipino were so small, the researchers did not distinguish between ethnic minority groups. Additionally, 70% of the respondents were women; therefore, generalizations should be limited across genders.

Social Support Factors

As noted in the previous section, Latino students reportedly experience academic and social stress, which may influence their level of adjustment to college. Various forms of support are suggested to influence adjustment; however, several researchers (N. Rodriguez et al., 2003; Solberg et al., 1994), found that despite the literature suggesting the importance of social support in mitigating stress, few have been able to confirm this hypothesis. Social support, however, was correlated with adjustment in several cases (N. Rodriguez et al., 2003; Solberg et al., 1994) and is considered further in this section. This section will appraise the literature surrounding social support and adjustment without considering the stress factors previously discussed. Although stress may produce positive or negative outcomes, it is often viewed as a negative factor in relation to adjustment. For this reason, some researchers have chosen to examine different variables when studying adjustment.

Zea, Jarama, and Bianchi (1995) proposed that the interaction of satisfaction with social support and psychosocial competence can significantly predict college adaptation for ethnic minority and non-minority students. In order to test their hypotheses, they investigated the role of social support and psychosocial competence in adaptation to college, examined the relationship of social support and psychosocial competence, and explored differences across four ethnic groups. Social support was measured by a person's perception of the amount of emotional support, guidance, financial support, feedback, physical interaction, and social interaction received (Zea et al.). Psychosocial competence was defined as the ability to function effectively and included active coping and locus of control (Zea et al.). Successful adaptation was defined as "being socially

integrated with other students, participating in campus activities, responding to academic requirements, and being attached and committed to the educational institution" (Zea et al., p. 511).

Zea at al. (1995) sought to determine which influences on adjustment can be generalized across ethnic minority and non-minority students, since few studies had examined college adjustment specific to ethnically diverse populations. The authors used a sample of 298 college students from various ethnic backgrounds enrolled at a private university in the northeast. The usable sample size included 56 (18.8%) African Americans, 66 (22.15%) Latinos, 71 (23.83%) Asian Americans, and 105 (35.23%) Caucasians; 203 (68.12%) were female and 95 (31.88%) were male (Zea et al.). Zea et al. used the Arizona Social Support Interview Schedule (ASSIS) developed by Barrera to measure social support, a portion of the Behavioral Attributes of Psychosocial Competence Scale (BAPC) developed by Tyler to measure psychosocial competence, the Internal-External Locus of Control Scale (IE) created by Rotter to measure locus of control, and the Student Adaptation to College Questionnaire (SACQ) developed by Baker and Siryk (1984) to measure adaptation. Zea et al. determined reliability of the scores for each instrument across individual ethnic groups to be between .70 and .93, concluding that the internal consistency of each instrument was comparable across ethnic groups.

Using analysis of variance, Zea et al. (1995) discovered that there are differences in satisfaction with social support and locus of control among the four ethnic groups. Zea et al. then conducted Scheffe post hoc tests and found that White and African American students were more satisfied with social support than Asian American students. Latino

students, however, did not significantly differ from the other groups in regards to satisfaction with social support (Zea et al.). For locus of control, Scheffe post hoc tests revealed that African American and Latino students were more internally controlled than White students (Zea et al.). The authors did not determine any significant differences for adaptation to college or active coping for any of the four groups.

In order to test their hypotheses, Zea et al. (1995) used analysis of covariance to control for family income, parents' educational level, age, and gender. They chose analysis of covariance over regression since they had categorical and continuous variables (Zea et al.). Zea et al. concluded that satisfaction with social support and active coping are predictors of adaptation; however, locus of control was not determined to be a significant predictor of adjustment (Zea et al.). They also found that satisfaction with social support and active coping played an important role in college adjustment for all four ethnic groups (Zea et al.). The interaction of ethnicity and locus of control was also significant in predicting adjustment; however, the interaction of ethnicity and social support was not. Comparing the linear relationship of locus of control and adaptation to college for each ethnic group, Zea et al. concluded that greater internality was related to adjustment for African American, Latino, and White students.

These findings suggest that in relation to adjustment, the act of coping is more effective than the belief that one is in control over the events that could occur while in college. Additionally, these findings suggest that all students, including White students, need some form of support in order to successfully adapt to college. White students, as argued by Smedley et al. (1993), must also deal with general concerns in adjusting to college but are less affected by campus racial climate, interracial stresses, racism, and

discrimination. These findings also highlight the need to continually compare the difference in levels of adjustment between ethnic groups in order to fully understand each group's needs.

Schneider and Ward (2003) examined the role of ethnic identification and perceived support in the academic adjustment, social adjustment, personal/emotional adjustment, and institutional attachment of Latino students. For the study, ethnic identification referred to the extent that Latino students view their ethnic identity as an important part of their self concept (Schneider & Ward). Social support included five types of support including family support, general peer support, Latino peer support, faculty support, and institutional support.

For the study, Schneider and Ward (2003) used a sample of 35 Caribbean, Central American, and South American Latino students at a midsize liberal arts college in the northeast. The sample included 26 females and 9 males, with 51% freshman, 40% sophomores, and 9% recent transfer students. At the time of the study, Latinos from a range of ethnic backgrounds comprised 3% of the total student body at the institution. Slightly more than half of the respondents (54%) considered English their native language. Schneider and Ward developed two instruments for the study and used a third that was already in existence. The first instrument created was a 14-item scale to measure ethnic identification; the second was a 46-item scale to assess perceived social support. The third instrument was Student Adaptation to College (SACQ) developed by Baker and Siryk (1984) which measured five types of adjustment to college.

First, Schneider and Ward (2003) examined the relationship between perceived levels of support and adjustment to college. Bivariate correlations revealed that total

perceived support, family support, and institutional support were significantly related to all levels of adjustment to college for Latino students (Schneider & Ward). Additionally, perceived faculty support was positively related to overall adjustment, social adjustment, institutional adjustment, and academic adjustment (Schneider & Ward). Utilizing five different multiple regression analyses, Schneider and Ward concluded that the combined effects of perceived general peer support, faculty support, and institutional support played a positive role in the overall adjustment to college for Latino students. Perceived family support was a sole indicator of overall adjustment, emotional adjustment, and academic adjustment for Latino students (Schneider & Ward).

Schneider and Ward (2003) concluded that the cumulative effect of various forms of support must be considered when examining the college adjustment of Latino students. These findings were similar to those found by Gonzalez (2002) who concluded that family, friends, role models, and language concurrently served as important sources of support for Latino students adjusting to life at a predominantly White institution. Schneider and Ward also concluded that the conjunction of perceived general peer support, faculty support, and institutional support are related to adjustment while perceived family support is correlated with adjustment but comes from a different source. Surprisingly, Latino peer support was not significantly related to adjustment for the Latinos in the study. This may be due to the small sample size used for the study. It may also be due to the fact that there was a small percentage of Latino students enrolled at the institution, making it more difficult for Latino students to find comfort in their own racial and ethnic community. For this reason, studies are needed to continually examine the

differences across institution type. Schneider and Ward may have found different

conclusions had demographic characteristics been different at the institution.

Although the experiences of Students of Color are often studied simultaneously,

Throgmorton (1999) proposed that Latino/Chicano students adjust to college differently

from African American students and therefore require different levels of support. In an

effort to understand what African American students and Latino/Chicano students

perceive as contributing factors to their enrollment persistence, Throgmorton conducted a

qualitative study at the University of California, Irvine (UCI) utilizing both interviews

and focus groups. A random sample of first-year, traditionally aged African American

and Latino/Chicano students living in the residence halls were invited to participate.

Additionally, first-year, traditionally aged African American and Latino/Chicano

commuter students were invited, although identifying this community was challenging

since there was not a commuter affairs office at UCI. Of those invited to participate,

Throgmorton interviewed 41 residential students, 9 commuter students, and conducted 7

focus groups ranging in size from 4 to 7. In addition, Throgmorton interviewed the

Director of the Cross-Cultural Center and the campus Director of the California Alliance

of Minority Participation (CAMP). Using triangulation, Throgmorton analyzed the

responses in relation to three categories. The three categories included: (a) stories from

home and the transition to college, (b) expanding social connections and discovering self,

and (c) perceptions of incorporation.

Through his observations and interviews, Throgmorton (1999) concluded that

African American students and Latino/Chicano students enter college with different

expectations and experiences leading them through different levels of transition. For

example, although Latino/Chicano students rely on family members for moral support during their time of transition to campus, they often seek out concrete advice from college outreach staff, faculty, and friends. African American students at UCI, however, reported using family members for both academic and moral support (Throgmorton). These differences may be due to the fact that the Latino/Chicano students in the study were mostly first-generation college students while many of the African American students were not. The African American students, therefore, could seek out advice and encouragement from family members who had gone to college. Throgmorton concluded that Latino/Chicano students lacked the "roadmap" needed to guide them through the transition to college. In a study conducted by N. L. Cabrera and Padilla (2004), first-generation students with immigrant parents from Mexico also reported using high school counselors and tutors as role models during their transition to college since their parents lacked information about college.

Institutional Support Factors

As posited by Schlossberg (1981), the pre-transition and post-transition environment also affects one's ability to adjust to change. In studying the transition of Latino students, some researchers have focused on institutional support as a possible variable of importance. Institutional support for Latino students, therefore, is examined further in this section.

Hurtado, Carter, and Spuler (1996) examined the role that student background characteristics, college structural characteristics, general college climate, and student behaviors have on Latino students' adjustment to college in the second year of matriculation. Hurtado et al. focused their study on Latino college students who were top

performers on the PSAT in their junior year in high school. The students selected for the study were semifinalists for a national merit program called the National Hispanic Scholar Awards Program (NHSAP) (Hurtado, 1994). The multi-institutional study focused on the first-year cohort who entered a number of universities in 1991. The overall response rate was 60% (Hurtado et al.).

Using data from five national sources, Hurtado et al. (1996) assessed Latino students' level of academic adjustment, social adjustment, personal-emotional adjustment, and institutional attachment. Data sources included a comprehensive longitudinal survey called the National Survey of Hispanic Students (NSHS) and a follow-up to the NSHS (Hurtado et al.). The data were linked to information maintained by the U.S. Department of Education's Integrated Postsecondary Educational Data Systems (IPEDS), the 1992 edition of the *College Handbook*, and institutional data files (Hurtado et al.). The Student Adaptation to College Questionnaire (SACQ) was used to measure student adjustment.

Using exploratory factor analyses, Hurtado et al. (1996) reduced the number of measured variables prior to conducting multiple regression analyses. In order to determine significant predictors of adjustment, student background characteristics, college structural characteristics, general college climate measures, and student behavior measures were entered in a hierarchical manner. Hurtado et al. found that background characteristics did not have a significant relationship with Latino students' overall adjustment to college. A few college structural components, however, were found to be related to transition. For example, Latino students who attended private colleges had high levels of social adjustment and institutional attachment while those who attended

institutions with a high Hispanic enrollment had high levels of academic adjustment (Hurtado et al.). Latino students who perceived high levels of racial hostility on campus showed evidence of lower overall adjustment (Hurtado et al.). Additionally, interaction with faculty was positively related with academic adjustment while family support was positively associated with personal-emotional adjustment (Hurtado et al.). This finding was consistent with results reported by Nora and Cabrera (1996) in which parental encouragement was positively correlated with ethnic minority students' college adjustment as measured by campus integration, intellectual development, and academic performance. Other findings reported by Hurtado et al. were that college peer mentors, including upperclass students, roommates, and resident advisors, may aid in the social adjustment of first-year Latino students. Hurtado et al.'s assessment made an important contribution to the current literature since it is one of few studies utilizing a national data source. Although a multi-institutional survey creates a threat to internal validity, it may be more effective in generalizing across the Latino population.

Another institutional support factor that is important to Latino students is the amount of cultural nourishment present on the campus. Gonzalez (2002) argued that cultural nourishment on campus is critical to the successful adjustment of Latino students and may include the availability of Chicano studies classes, the presence of cultural artifacts on campus, and student participation in cultural organizations. Fiske (1988) posited that perceptions of cultural congruity have an influence on whether or not ethnic minority students persist in college. Cultural nourishment on campus, therefore, may help alleviate the cultural incongruity perceived by ethnic minority students attempting to adjust to campus. The desire for cultural nourishment and level of adjustment may also

be connected to various levels of ethnic identification for Latino students. As claimed by Schneider and Ward (2003) Latino students who possessed high levels of ethnic identification often perceived lower levels of combined support on campus and therefore had more trouble adjusting to campus.

As suggested by Throgmorton (1999) Latino/Chicano students may also find comfort in transitional programs such as the California Alliance for Minority Participation (CAMP) at UCI, and are more likely to feel connected to the campus following participation in these types of programs. Latino/Chicano students who attended the CAMP program at UCI reported feeling ease and comfort on campus when they saw other students like them (Throgmorton). The results of an ongoing study of Latino students who traditionally have been subjected to low expectations and denied access revealed that a number of the students involved in a TRIO Student Support Service Program (SSS) credited SSS for their success in transitioning to college (Martinez, 2003). These results paralleled those of Loo and Rolison (1986) in which minority students reported receiving strong support from Educational Opportunity Programs (EOP).

Summary of Transition and Adjustment

In reviewing the current literature addressing transition and adjustment for Latino college students, a number of trends and limitations arise. To begin, Latino students reportedly have issues with academic and social stress, which may ultimately affect their adaptation to college (Quintana et al., 1991; Smedley et al., 1993). Additionally, various forms of support were suggested to influence adjustment (N. Rodriguez et al., 2003; Solberg et al., 1994). In reviewing the studies that examined the relationship of social support and adjustment, social support was found to be correlated with adjustment to

college for Latino students (Schneider & Ward, 2003; Zea et al., 1995). As noted, however, social support was less likely to reduce the amount of stress experienced by students during their transition (N. Rodriguez et al., 2003; Solberg et al., 1994). This may be due to the fact that stress, as argued by Schlossberg (1981), may result in positive outcomes, including successful adjustment. These findings highlight the fact that stress related to transition may be inevitable for Latino students, although successful adjustment is still feasible if they receive an adequate amount of social support. The current study focused on social support and its relationship with adjustment. Institutional support factors were also suggested to affect Latino student transition, highlighting the importance of considering many aspects of the environment including demographics of the student population, location of the institution, student support services available, and campus culture (Gonzalez, 2002; Hurtado et al., 1996; Schneider & Ward, 2003; Throgmorton, 1999). Of these factors, campus culture and its effects on Latino and other ethnic minority students have been empirically tested. The next section, therefore, will continue to examine the pre- and post-transition environment by focusing on some of the current research on campus racial climate and alienation of ethnic minority and Latino students.

Campus Racial Climate and Alienation

Thus far, a number of dynamics have been presented as possible contributors to the Latino student experience with campus matriculation. As highlighted, campus culture, faculty support, and student demographics may help or hinder Latino students' ability to successfully adjust to college. Campus racial climate and its alienating effects on ethnic minority students and their ability to successfully transition are discussed in this section.

Campus Racial Climate for Latino Students

Gloria and Kurpius (1996) argued that universities should be concerned with the attitudes of racial and ethnic students towards the university environment since their perceptions may influence academic persistence. The authors reported that students who failed to persist often cited that reasons for leaving included competitive and impersonal environments, isolation on campus, and higher levels of stress due to alienation (Gloria & Kurpius). Additionally, Gloria and Kurpius proposed that cultural congruity influences the persistence of racial and ethnic minorities. They explained that "individuals belonging to two or more cultures may experience cultural incongruity if the cultures are different in values, beliefs, and expectations for behavior" (p. 535). Gloria and Kurpius found that as a result of incongruities, Latino students sometimes struggled with their own cultural identity and were often forced to choose between the majority racial/ethnic culture on campus or their own in order to succeed. In reviewing the literature, however, Gloria and Kurpius did not find evidence of an existing instrument to measure perceptions of the university environment and cultural congruity. In order to address this issue, the authors developed and validated two instruments, namely, the University Cultural Environment Scale (UES) and the Cultural Congruity Scale (CCS) (Gloria & Kurpius). Items included in the UES assessed students' perceptions of the university's ability to provide services such a tutoring, course advisement, and financial aid assistance while the CCS addressed personal racial and ethnic values, social identity, and comfort in using different languages on campus (Gloria & Kurpius).

To pilot both instruments, Gloria and Kurpius (1996) first used two small samples of racial/ethnic undergraduate students recruited from a general education class at a large

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Southwestern university. The original version of the CCS was pilot tested with a sample of 18 respondents; the pilot sample for the original version of the UES included 59 respondents. Gloria and Kurpius then used two larger samples of Chicano/a undergraduate students recruited from classroom settings, campus organizations, and residence halls at two large universities in order to validate the instruments (Gloria & Kurpius). A total of 163 students from University of California, Irvine responded and a total of 291 students responded from Arizona State University (ASU). The students represented a range of class levels including freshman, sophomores, juniors, and seniors; most self-identified as Mexican American, Hispanic, or Chicano/a. Each participant was asked to complete the UES, CCS, and the Persistence/Voluntary Dropout Decision Scale developed by Pascarella and Terenzini. The scale is a five-point Likert scale which measures a student's decision to stay in school or depart; higher scores reflect a negative decision regarding persistence (Gloria & Kurpius).

Gloria and Kurpius (1996) used regression analyses to determine the predictive validity of the CCS and UES on persistence decisions. The CCS as a measure of cultural congruity accounted for 11% of the variance in academic persistence with a negative correlation between academic persistence and cultural congruity. Based on the directionality of the scale used to measure persistence, this indicated that students with a more positive perception of cultural congruity were more likely to persist (Gloria & Kurpius). For the UES, perceptions of the university accounted for 25% of the variance in persistence. A negative correlation between the two indicated that if students viewed the university environment more positively, they were more likely to persist (Gloria & Kurpius). These findings validated Gloria and Kurpius's predictions that perceptions of

the campus environment and cultural congruity affected persistence for ethnic minority students, particularly Chicano/a students.

Hurtado (1994) posited that student background characteristics, college structural characteristics, general college climate, and student behaviors may all affect Latino students' perceptions and experiences with racial and ethnic campus racial climates. In order to test her hypotheses, Latino students with high ranks on the PSAT and top performers on the Prueba de Aptitud Academica (PAA) were sampled. Additionally, students were semifinalists for the National Hispanic Scholar Awards Program (NHSAP). Using three data sources and the cohort of students entering different universities in 1991, Hurtado conducted a longitudinal study focusing on the institutional climate for talented Latino students. Hurtado included 859 sophomores and juniors attending 224 colleges, each identifying as Chicano ($n = 386$), Puerto Rican ($n = 198$), or other Latino including Cuban, Latin American, Central American, and Hispanic ($n = 275$).

Hurtado (1994) used exploratory factor analysis to collapse the data into scales consisting of items with a factor score of .35 or more. Hierarchical multiple regression analyses were then conducted to determine the significant predictors of campus racial climate perceptions of high achieving Latino students. For student background characteristics, she concluded that those students who perceived inequalities in the larger society also experienced higher levels of inequality on campus. This suggests that current political and societal issues may have an effect on the amount of racial tension experienced by students on campus (Hurtado). For example, students at the University of Texas, Austin (UT Austin) perceived higher levels of tension on campus during the

Hopwood v. State of Texas case in which race considerations in admissions practices were being scrutinized (V. V. Cabrera, 1998).

Institutional type was also found to play a role in the level of racial and ethnic tension experienced by Latino students. High-achieving Latino students attending a large institution, a highly-selective institution, or an institution located in a small college town reported high perceptions of discrimination on campus (Hurtado, 1994). Additionally, students who attended campuses with a large Hispanic enrollment were less likely to perceive high levels of discrimination on campus (Hurtado). This parallels findings by Nora and Cabrera (1996) in which ethnic minority students at a predominantly White institution in the Midwest reported higher perceptions of discrimination and prejudice on campus and within the classroom than did their White counterparts at the same institution.

Hurtado (1994) also found that Latino students on campuses where very few people knew about their Hispanic culture were more likely to experience discrimination. This is similar to claims made by Fiske (1988) regarding the sense of alienation perceived by students on campuses that lacked reflection of Hispanic culture in the curriculum and literature. Finally, Hurtado revealed that Latino students who reported informal interactions with White students and those involved in Hispanic student organizations were more likely to perceive various levels of racial tension but were less likely to experience discrimination on campus (Hurtado). This may be due to the fact that through involvement in Hispanic student organizations, students are made more aware of the presence of racism on campus and are more likely to notice it. Additionally, participation in these organizations may buffer the effects of discrimination.

These findings suggest that institutions should take some responsibility for creating inclusive environments open to difference. Although some higher education administrators may be working towards developing more inclusive environments, some Latino students continue to report feelings of alienation on campus. The next section further explores campus alienation and its influence on perceptions of campus racial climate for ethnic minority and Latino students. Many of the factors suggested by Hurtado (1994) to affect Latino students' perceptions of campus racial climate have been argued by researchers to influence alienation, isolation, and discrimination of ethnic minorities and ultimately adjustment levels (A. F. Cabrera & Nora, 1994; Gonzalez, 2002; Loo & Rolison, 1986).

Alienation on Campus

As proposed by A. F. Cabrera and Nora (1994) ethnic minority student alienation on campus is influenced both by the intolerance expressed towards ethnic minority students and their perceptions of prejudice and discrimination on campus. In a study comparing the alienation perceived by members of various ethnic groups at a predominantly White institution, A. F. Cabrera and Nora concluded that each group experienced alienation in a different way. Using a construct validation approach, the authors hypothesized that three constructs contributed to ethnic minority student perceptions of prejudice and discrimination on campus (A. F. Cabrera & Nora). The three constructs included campus racial/ethnic climate, faculty and staff prejudicial attitudes, and in-class discrimination (A. F. Cabrera & Nora). The three constructs were proposed based on a content analysis of a series of focused interviews with students at Arizona State University (A. F. Cabrera & Nora). A. F. Cabrera and Nora then created a model

which proposed that higher perceptions of prejudice and discrimination based on the three constructs resulted in higher levels of alienation experienced.

In an attempt to validate the model, A. F. Cabrera and Nora (1994) sampled entering first-year students in fall 1990 at a public, commuter, predominantly White institution in the Midwest. The total number of usable surveys was 879 with 10.7% African American, 21.6% Asian American, 17.2% Hispanic, and 50.5% White respondents (A. F. Cabrera & Nora). Proportional to the campus population, the sample slightly overestimated the number of Hispanic students (12.5%) and underestimated the number of African American (12.5%) and Asian American (25%) students on campus (A. F. Cabrera & Nora). In order to test the ability of each sub-construct to assess alienation as an outcome, the authors used structural equation modeling and developed covariance matrices (A. F. Cabrera & Nora). They also used confirmatory factor analyses and structural equation modeling to test for validity of the constructs (A. F. Cabrera & Nora). The alpha coefficient for the entire sample population was .84 (A. F. Cabrera & Nora).

Testing the model on each individual group, A. F. Cabrera and Nora (1994) concluded that for all ethnic minority students, in-class discrimination was the only factor that directly contributed to increased feelings of alienation. Members of each ethnic minority group, however, consistently reported higher perceptions of negative feelings than White students (A. F. Cabrera & Nora). Goodness of fit tests also provided evidence to support A. F. Cabrera and Nora's hypothesized three factor structure. Furthermore, the authors concluded that although perceptions of campus racial climate and prejudiced faculty and staff did not directly contribute to higher levels of alienation perceived by

ethnic minority students, the two constructs were highly correlated with in-class discrimination and therefore had an indirect effect on alienation (A. F. Cabrera & Nora).

A. F. Cabrera and Nora's (1994) study made an important contribution to the literature on campus racial climate and alienation because the authors analyzed their findings for each individual ethnic group as opposed to clustering them all together into one group such as "Students of Color" or "ethnic minorities." Although their study provides a framework for assessing minority student alienation, it was conducted 10 years ago, which may be considered a limitation. As the number of ethnic minority students entering college increases (Schmidt, 2003a), perceptions of campus racial climates may also change; therefore updated research is needed.

Loo and Rolison (1986) examined the extent to which ethnic minority students, including Chicanos, African Americans, Asian Americans, Native Americans, Filipinos, and racially mixed students, at a predominantly White institution experienced socio-cultural alienation and academic satisfaction. The views held by ethnic minority students regarding alienation were then compared to those views held by White students at the same institution (Loo & Rolison). Face-to-face interviews were conducted with a sample of 109 ethnic minorities and 54 White students at a small public university on the west coast. The authors found that ethnic minority students reported higher feelings of social isolation and were less likely than White students to sense that the university reflected their values (Loo & Rolison). Ethnic minority students also reported experiencing academic difficulties due to the "culture shock" of transitioning to college (Loo & Rolison). As a result of academic struggles and isolation, ethnic minority students reported greater desires to drop out than their White counterparts (Loo & Rolison). One

limitation worth noting is that by discussing a sensitive topic such as alienation, experimenter effects caused by personal interviews may have created a response bias, depending on the interviewer's ethnicity in comparison to the respondent's. Discomfort may have occurred for respondents depending on their own level of ethnic identification. The researchers, however, did not reveal their own ethnicity so this is difficult to conclude.

Eight years following Loo and Rolison's study, LeSure (1994) reported that African American and Latino students continued to experience racism on campus. The researcher compiled data from a multi-ethnic sample of students attending one of five small, private colleges in California with a predominantly White student population. The sample consisted of 40 African American students, 159 Asian American students, 210 Anglo students, and 103 Latino students. Using a locally designed questionnaire, LeSure assessed a range of issues including experience with racism, perceived racism, academic adjustment, grade point average, and social adjustment. Using analysis of variance and a series of post hoc tests, the researcher compared ethnic minority students' experiences and perceptions of racism on campus with those of Anglo students. African American and Latino students who reportedly experienced racism on campus were found to be less socially and academically adjusted than their White counterparts (LeSure). Additionally, African American students reported experience with racism more often than Latino students but were able to buffer the negative effects with more ease.

A major limitation of this study was LeSure's (1994) use of White students in a study addressing experience with racism. From a social justice framework, White students technically cannot experience racism (Tatum, 2000). The White students were

asked not to complete the questions addressing feelings of racism, which made it more difficult to compare their responses with those responses of the ethnic minority students. Despite this limitation, the comparison of African American and Latino students is interesting, although further research should be conducted to examine this phenomenon more closely. This will inevitably inform the literature regarding Latino students' experience with racism on campus.

Five years following LeSure's (1994) study, ethnic minority students continued to show signs of difficulties in transitioning from a fairly homogenous high school, comprised of students with similar racial and ethnic backgrounds, to a predominantly White university. Throgmorton (1999) reported that Latino/Chicano students who were members of the dominant population at their high schools reported feeling overwhelmed when they arrived at UCI where they were no longer part of the majority. Many were challenged, for the first time, with racial and ethnic stereotypes and often felt isolated in their residence halls (Throgmorton). Orozco (2003) echoed similar sentiments in her personal story about transitioning to UCI where she experienced culture shock as a result of transferring from a high school consisting of a predominantly Latino population to a university campus with a 12% Latino population.

In addition to these empirical studies examining the differences experienced by ethnic minorities on campus, a number of researchers have specifically examined Latino students and concluded that this population continually struggles with hostile campus racial climates and discrimination. As reported by Hurtado (1994), 28.6% of high-achieving Latino students in a multi-institutional study felt as though they did not "fit in" on their campus. Additionally, 42.7% of those high-achieving students reported that

many students on their campus believed they were special admits; 29.1% felt like there was a lot of racial tension on their campus; and 17.9% had heard inappropriate comments made by faculty members. This reality was echoed by first generation Mexican American students at the University of Texas, Austin (UT Austin) who cited several examples of faculty members making discriminatory remarks in class. For example, one student reported an incident in which his Latin American geography professor made claims that all Latin Americans were corrupt and that he disliked Latin American heritage (V. V. Cabrera, 1998). Another student discussed an incident whereby a biology professor at UT Austin made claims of a large incest problem in Mexico (V. V. Cabrera).

Effects of Alienation and Hostile Campus Racial Climates

There are a number of reasons why campus administrators should be concerned with the effects of alienation and perceptions of campus racial climate on Latino students. As highlighted by Hurtado et al. (1996) Latino students' perceptions of racial and ethnic tension on campus negatively affect their personal-emotional adjustment, attachment to the institution, and social and academic adjustment. For example, Latino students who lack trust in administrators, or feel as though they do not "fit in," may have a harder time adjusting to campus. In comparison, high-achieving Latino students reported lower levels of experienced racial and ethnic tension when they felt as though administrators were open and inclusive and faculty members were supportive (Hurtado, 1994). Hurtado and Carter (1997) found that Latino students who experienced discrimination in their second year of college and Latino students who perceived the campus racial climate to be negative were less likely to feel a sense of belonging in their third year of matriculation.

This was an important finding since sense of belonging has been suggested to influence persistence decisions (Tinto, 1993).

In a qualitative study conducted at a predominantly White institution in the Southwest, Gonzalez (2002) used an interpretive research design and concept modeling to explore Chicano students' interpretations of the university environment and the campus culture. The two respondents in the study reported consistent feelings of marginalization and alienation due to the lack of Chicano representation on campus (Gonzalez). Students who were interviewed reported feelings of misplacement on campus and discomfort when speaking Spanish around non-Latino students (Gonzalez). Additionally, the students were upset by the lack of cultural knowledge on campus and the exclusion of Latino culture in the curriculum (Gonzalez). Hurtado (1994) also reported a higher sense of discrimination experienced by high-achieving Latino students who attended campuses where students generally had little knowledge of Hispanic culture. In a separate study, Hurtado and Cabrera (1996) found that unfavorable perceptions of the campus racial climate were shown to have a negative relationship to ethnic minority students' adjustment to college.

Coping with Alienation and Hostile Campus Racial Climates

Despite the struggles Latino students face in dealing with racial discrimination, many learn to cope in order to succeed. Resiliency, personal motivation, and participation in racial/ethnic student organizations have been suggested coping mechanisms for Latino students.

Resiliency and motivation. As suggested by Rendon (2003), Latino students are resilient and will overcome the adversity faced on campus. Although Students of Color at

UCI struggled to fit in on a campus where they were underrepresented, many of them reported that their desire to succeed outweighed their feelings of isolation, therefore they learned to "cope" as a means of survival (Throgmorton, 1999). N. L. Cabrera and Padilla (2004) also reported that academically successful Latino students at Stanford University possessed high levels of intrinsic motivation and were determined to overcome obstacles they faced. Students at UT Austin believed when faced with a hostile campus racial climate, the Hispanic student population unites in the struggle and fights for a neutral condition on campus (V. V. Cabrera, 1998). One student from UT Austin stated that unfriendly racial climates motivated her to excel in school in order to disprove the stereotypes (V. V. Cabrera). These examples suggest that students with a high desire to succeed will find a way to adapt to hostile campus environments.

High-achieving Latino students in a multi-institutional study reported that although they may experience chilly campus racial climates, they often interact with students from other backgrounds on an informal basis (Hurtado, 1994). This suggests that Latino students make an attempt to fit in with the majority culture in order to avoid alienation. Many Latino students, however, reported that despite high levels of informal interactions with peers, faculty, and staff from various ethnic groups, they often lacked intimate relationships (Hurtado). Similarly, Hispanic students on campuses where they did not feel proportionately represented by the faculty and staff often reported a lack of faculty and staff role models (Fiske, 1988).

Membership in racial/ethnic student organizations. In addition to resiliency and motivation, it has been suggested that membership in a racial/ethnic student organization can help to alleviate the marginality, discrimination, and alienation perceived by Latino

students on a predominantly White campus. Hurtado and Carter (1997) reported that although sense of belonging was lower for those Latino students on campuses characterized by racial-ethnic tension, Latino students involved in racial/ethnic student organizations often had an increased sense of belonging. Hurtado and Carter also found that Latino students who belonged to a fraternity or sorority had a stronger sense of belonging in their second year of matriculation. Several students at UT Austin credited their involvement and membership in ethnically based student organizations such as MEChA (Movimiento Estudiantil Chicano de Aztlan) for their ability to become acculturated into the campus community (V. V. Cabrera, 1998). N. L. Cabrera and Padilla (2004) also found that successful Latino students at Stanford University reported involvement in MEChA. Although these students reported feelings of marginalization among the majority of the student body, MEChA provided them the opportunity to surround themselves with those possessing similar values and allowed them a chance to discuss social issues surrounding the Latino community. As suggested by Layzer (2000) Latino students often join ethnic organizations in order to establish themselves as "normal" within a larger context of marginality and exclusion. Despite these findings, Hurtado and Carter proclaimed additional studies are needed on racial/ethnic student organization involvement in order to determine how they affect racial/ethnic students.

Summary of Campus Racial Climate and Alienation

Despite changing demographics in U.S. colleges and universities as well as changing perceptions of racial difference, these findings highlight the fact that racism and discrimination still exist on campus. In turn, students from ethnic minority groups continue to suffer the consequences of this reality. The abundance of literature

concerning Latino students' perceptions of campus racial climate and experiences with alienation and isolation accentuates the importance of this concern.

Although a number of studies have reported that alienation and isolation still exists on campus for ethnic minority groups, few researchers (Hurtado et al., 1996; LeSure, 1994) have conducted studies to determine how alienation, isolation, and discrimination specifically affect their transition and adjustment to college. Additionally, few studies have examined the interaction of social support and feelings of isolation on campus and their combined effects on adjustment. The current study attempted to fill these gaps in the literature.

A major limitation of the studies reviewed is that racial and ethnic minority groups are often clustered into one category, therefore making it more difficult to generalize to individual groups such as African Americans and Latinos. Additionally, the availability of multi-institutional studies are limited, which, as suggested by Hurtado (1994), may provide a different perspective based on geographic location, institutional type, and demographic diversity on campus. By focusing on Latino students and utilizing a multi-institutional sample, the current study made an attempt to address these limitations.

Transition and Adjustment in Relation to Retention

Transition and adjustment issues are important to study since they ultimately affect persistence. A student who is unsuccessful in adjusting to campus is more likely to drop out, stop out, or transfer to another institution (Tinto, 1993). As asserted by Tinto, retention and persistence are affected by adjustment issues, academic and social difficulties, incongruence, and isolation. It is important, therefore, to carefully examine

transition- related factors that affect Latino students since successful adjustment will increase the likelihood of persistence. Additionally, the campus racial climate is important to study since it ultimately affects the level of congruence perceived by Latino students as well as the level of alienation and isolation experienced.

Since adjustment may ultimately affect persistence, it is no surprise that a number of factors posited to influence adjustment have also been proposed to affect persistence. For example, Rendon (1995) argued that transition into college as well as connections made once matriculated are critical to the persistence decisions of ethnic minority students. Rendon also posited that institutional barriers such as Euro-centered curricula, detached faculty, and a campus racial climate indifferent to the needs of ethnic minority students will negatively affect their retention and ultimate success.

Empirical studies, however, have led to inconsistent conclusions. In an attempt to further understand the role that campus racial climate plays in the persistence of ethnic minority students, Nora and Cabrera (1996) sampled 831 multi-ethnic students from a predominantly White institution in the Midwest. Using a variety of statistical procedures, the authors determined that perceptions of prejudice and discrimination on campus had a negative effect on the adjustment of ethnic minority students. These perceptions, however, were not found to have a direct effect on ethnic minority students' decision to persist (Nora & Cabrera). In conclusion, Nora and Cabrera argued that prejudice and discrimination had an indirect effect on persistence.

A number of institutional factors have been proposed to assist in the retention of Students of Color on campus. Upcraft and Gardner (1989) outlined five factors that most likely lead to academic success and persistence for minority students. These five factors

include personal characteristics, demographic characteristics, cultural characteristics, institutional characteristics, and institutional climate. The five factors are similar to the factors argued by Schlossberg (1981) to affect transition and adjustment.

Empirical Studies on Latino Student Retention

A number of researchers have examined retention issues specific to Latino students. Many of the factors suggested to influence retention and persistence for Students of Color have also been highlighted as factors affecting Latino students' decisions to persist. The findings highlight the importance of examining transition issues for Latino students since similar variables have been suggested to affect both the successful adjustment and persistence of Latino students.

In an attempt to further understand Latino student retention, Hernandez (2000) conducted a qualitative study at a large public institution in the mid-Atlantic. The study consisted of five Latino men and five Latina women ranging in age from 21 to 25 years. Using maximum variation sampling, a three-phase interview process, and a constant comparative method of data analysis, Hernandez identified 11 relevant factors related to Latino student retention. The 11 factors included a desire to succeed, familial support, peer support, faculty and staff support, co-curricular involvement, a sense of a Latino community on campus, finances, personal responsibility, people within the environment, personal experiences within the environment, and involvement (Hernandez). The participants thoroughly discussed the role of the environment on their success including the physical and human aspects (Hernandez). Many of the students suggested that they had to take an active role in making the environment work for them, despite its incongruities and lack of support (Hernandez). Despite the relatively small sample size,

this exploratory study shed light on a number of factors to be considered when thinking about Latino student retention. Additionally, a number of the factors reported by Hernandez to influence retention have also been argued to influence Latino students' ability to adjust to campus including familial support, friends and peers, faculty and staff support, and environmental factors (N. Rodriguez et al., 2003; Schneider & Ward, 2003).

Cabrera (1998) conducted a qualitative study at UT Austin in order to explicate persistence decisions made by first-generation Mexican American students at the university. Of those involved in the study, many believed their own desire to succeed was a major factor in their retention at UT Austin (V. V. Cabrera). Additionally, students listed peer support, family support, and faculty support as important determinants in their decision to remain at the university beyond their first year (V. V. Cabrera). Specifically, many students stated that the presence of faculty of color contributed to their development and retention as well as their involvement in campus organizations (V. V. Cabrera). Similar to the study conducted by Hernandez (2000), this study was exploratory in nature but V. V. Cabrera found similarities between variables that affect transition and those that ultimately influence Latino students' ability to persist.

In a quantitative study conducted by Longerbeam, Sedlacek, and Alatorre (2004) Latino students were compared to non-Latino students in an attempt to discover the between-group differences affecting retention. From the University New Student Census (UNSC), an online survey administered to all incoming students at a large public institution on the east coast, the authors utilized multiple analysis of variance (MANOVA) to compare group differences. Longerbeam et al. ascertained that Latino students were more appreciative of diversity than non-Latino students. Additionally,

Latino students expected that stress related to academic ability and financial concerns would ultimately affect their ability to persist on campus (Longerbeam et al.). Although the findings were similar to others observing Latino student retention, one limitation worth noting is that the UNSC is administered when students first enter the university; therefore it is only a prediction based on student responses. The UNSC would more appropriately be used as a pre-test in a longitudinal true-experiment of Latino student retention at the institution. The students who responded to the survey would need to be surveyed at the end of their academic careers for further examination of factors that actually influenced their persistence decisions.

Summary of Transition and Adjustment in Relation to Retention

Although there are a number of additional studies addressing the retention needs of Latino students, the studies reviewed have adequately summarized the major themes of the current literature pertaining to Latino student retention. In addition, the factors affecting Latino student retention have been similar to those suggested to affect Latino student transition to college. For example, institutional support, family support, and peer support have all been mentioned. Concerns with the environment and appreciation of diversity on campus have also been noted to affect both persistence and adjustment to campus. The parallels reflected in the literature further highlight the fact that both transition and retention are important variables to study either concurrently or separately. For the purpose of the current study, the focus was on transition and adjustment issues as they relate to Latino students. Specifically, this study was focused on transition and adjustment for Latina students; therefore, the next section is a review of the literature concerning Latina students.

Latina Students

Researchers contend that Latina students experience college differently from Latino students. For example, cultural norms and expectations are different for Latinas than Latinos, which ultimately affects their ability to succeed in college (Olivas, 1996; Orozco, 2003). Participation and integration into campus life has also been shown to affect Latinas differently from Latinos (Barajas & Pierce, 2001). Rodriguez, Guido-DiBrito, Torres, and Talbot (2000) posited that Latinas face distinct barriers to participation in higher education including socioeconomic status, social and family obligations, and financial stress factors. These differences and challenges warrant the need to study Latina college students separately from Latino college students in order to understand the nature of the difference. Additionally, Latinas are entering institutions of higher education at a faster rate and earning more degrees than their male counterparts (Schmidt, 2003a); therefore, additional research is needed to understand and properly serve this specific population.

Cultural Norms and Pressures for Latinas

There are a number of cultural norms and values that many Latinas are expected to adhere to as they enter adulthood. Traditionally, Latinas were viewed by their families and society as mothers, daughters, and wives (Gonzalez et al., 2004). Gonzalez et al. argued that these roles are changing, causing Latina students to struggle with opposing values held by their families and society. These women often report the frustrations they encounter in trying to negotiate cultural expectations and their own personal desires for independence and success. This becomes even more challenging as they enter college and begin exploring academic and career options. Quintana, Vogel, and Ybarra (1991)

reported that Latinas often experience greater levels of stress related to college adjustment than their male counterparts due to the added stress of negotiating cultural expectations and prescribed gender roles. A. L. Rodriguez et al. (2000) concurred that family obligations, conflicting educational values, and gender-role conflict added stress for Latina college students.

Traditionally, Latinas were not expected to earn a college degree or become educated beyond secondary education. Instead, they were expected to marry and care for their husband, home, and children (Olivas, 1996). Many of these values continue to be instilled in Latinas by their mothers, aunts, and grandmothers at a young age and are reinforced by their fathers. In a study conducted at a university in California, one Latina woman reported that her father did not want her to go to college and told her that she should get a job and live at home once she completed her high school diploma (Patterson, 1998).

Latinas entering institutions of higher education are reportedly finding it more difficult to adhere to cultural norms instilled by their families, which often creates problems as they pursue a degree. One woman in a study conducted at a public institution in California reported that the men in her family opposed her decision to go away to college and would hang up on her when she called home (Patterson, 1998). Another said that her mother discouraged her from attending a four-year university and instead encouraged her to attend the local community college while living at home (Patterson). Latinas at UCI reported that they often felt tension between cultural expectations to follow traditional gender roles and their own desire to pursue an education and professional career (Throgmorton, 1999).

Campus Integration

Despite family opposition and incongruities with cultural expectations, Latina students entering college have found a number of support systems that foster their campus integration while enriching their culture. In a study conducted at a large research institution in the Midwest, the experiences of Latina students on campus were compared with those of their male counterparts (Barajas & Pierce, 2001). In the study, Barajas and Pierce found that successful Latina students maintained a positive racial ethnic identity and found comfort in relationships with other Latina students more often than men. Membership in organizations catering to the needs of Latino/a students provided a safe space for many of these women, which differed from their male counterparts who often found comfort in sports and were more likely to assimilate with the dominant culture (Barajas & Pierce). Unlike Latino male students, the women had stronger perceptions of social support and did not feel "out of place" when surrounded by their peers on campus (Barajas & Pierce). Similarly, A. L. Rodriguez et al. (2000) argued that maintenance of a bicultural identity was advantageous for Latinas.

Beyond success, social support has also been found to foster cultural congruity for Latina students. In a study examining the relationship between collective self-esteem and perceived social support in predicting the cultural congruity of Latino students, Latina students were shown to have higher levels of cultural congruity than their male counterparts (Constantine, Robinson, Wilton, & Caldwell, 2002). Higher levels of perceived social support satisfaction were reported to contribute to this finding (Constantine et al.). As proposed by Constantine et al., collective social group

membership for these Latina students served as a buffer for the negative perceptions often held towards members of ethnic minority groups on campus.

Latina students at UCI were more likely than their male counterparts to be involved in clubs and organizations, and many found comfort in organizations that catered to their race and ethnicity (Throgmorton, 1999). This involvement helped them feel a greater sense of connection to the campus (Throgmorton). Some Latinas at UCI also reported a sense of empowerment through involvement in clubs and organizations on campus, making it easier for them to succeed (Throgmorton).

Summary of Latina Students

These findings suggest that although Latina students face a number of unique challenges upon entrance to the university, they are more likely to be successful in college if they surround themselves with peers from similar cultural and ethnic backgrounds. Involvement in cultural and ethnic organizations can not only help Latina students increase their sense of belonging on campus but also foster cultural congruity. The next section examines the role that participation in a Latina sorority has on Latina college students. This will help clarify the potential outcomes of involvement within an organization that caters to the ethnic and gender specific needs of Latina students.

<div align="center">Latina Sororities</div>

History of the Latino Greek Movement

Latino Greek-letter organizations (LGLO) date back to 1898 with the founding of a secret society known as Union Hispano Americana (*Phi Iota Alpha Fraternal History*, n.d.). In 1931, after several mergers with other organizations focusing on the needs of Latinos in higher education, Union Hispano Americana became known as Phi Iota Alpha

Fraternity, Inc., the first Latino fraternal organization (*Phi Iota Alpha Fraternal History*). The Latino Greek movement, however, did not fully emerge until the mid-1970s. In 1975, the first Latina sorority, Lambda Theta Alpha, Latin Sorority, Inc., was founded at Kean University (Layzer, 2000). Since then, the Latino Greek movement has exploded with the creation of over 75 Latino fraternal organizations (Kimbrough, 2003). As suggested by Kimbrough, LGLOs are founded with the purpose of supporting Latino students and have grown in popularity as a means of mitigating the difficulties of adjusting to campus. As revealed by the missions and purpose statements of many Latino fraternal organizations, these groups espouse the principles of hermandad (brotherhood/sisterhood), support, community service, academic achievement, empowerment, unity, activism, and cultural enrichment (Layzer).

Research on Latino Greek-letter Organizations

Despite the rapid expansion and growth of predominantly Latino Greek-letter organizations, there have been few empirical studies focusing on these organizations. Of the studies that have focused on LGLOs, most have been qualitative and exploratory in nature, thus serving as a foundation for a body of literature highlighting membership in these organizations. As claimed by authors of two studies (Layzer, 2000; Olivas, 1996) additional research is needed to substantiate their findings. Studies of traditional Greek-letter organizations have focused on a number of measurable outcomes including cognitive development, retention, social integration, and academic achievement (Astin, 1993; Pascarella et al., 2001; Pike, 2000; Wilder et al., 1997), whereas those conducted on Latino fraternal organizations have examined issues such motivation for joining and struggles for recognition on a predominantly White campus (Layzer; Olivas; Patterson,

1998). Additional research is needed to better understand the potential outcomes associated with joining these organizations.

Studies Focusing on Latina Sororities

In an attempt to better understand Latina sorority membership and the role that identity, cultural values, and gender norms play on the formation of such organizations, Olivas (1996) conducted a qualitative study of one Latina sorority. Additionally, Olivas sought to determine whether Latina sorority membership fosters retention, enhances academic achievement, and reinforces personal growth. The study was conducted at a public university in the Northwest with a 15% population of ethnic minorities. Using a case study design, Olivas conducted a series of semi-structured interviews with eight active undergraduate members, one alumna, and two Greek advisors. The sorority members self-identified as Mexican American, Mexican, Costa Rican, and Puerto Rican (Olivas). Olivas solicited volunteers for the interviews at a sorority meeting, conducted 20 hours of observations over a three week period, and transcribed the 45 minute tapes within three days of each interview. Using domain analysis, Olivas searched for semantic relationships and themes within responses. She then established four domains, which included gendered expectations and the role of familial "respeto," preserving cultural identity, "familia," and barriers related to oppression and discrimination. Overall, Olivas concluded that sorority membership was often sought as a means of social and academic support, preservation of cultural identity, and participation in a family away from home.

A number of themes emerged throughout Olivas' (1996) interviews, each relating to one of the four domains. For one, respondents felt as though the sorority was created as a means of survival on a campus where White sororities were often exclusionary and

elitist (Olivas). For these women, segregation was a means of preserving cultural values and familial traditions in order to combat feelings of isolation on a predominantly White campus. Many believed that the isolation and discrimination they experienced was a result of institutionalized racism. These women felt as though the sorority served as a sanctuary, a source of strength, and a buffer from stress-related issues surrounding family pressures at home (Olivas). As summarized by Olivas, the sorority provided its members with a sense of belonging and protection in an environment that was somewhat hostile and often contradictory to their cultural values. Olivas predicted that Latina sorority membership will continue to offer sanction to Latinas in college as long as racist and discriminatory practices persist on campus.

Olivas' (1996) study helped set the foundation for future research on Latina sororities and the influence of membership. As suggested by McMillan and Schumacher (2001), qualitative research does not aim at making generalizations but instead enables future researchers to continue studying the phenomenon. Although one of Olivas' research questions was to determine if membership fosters retention, there was no significant analysis or conclusion surrounding this question. This may be due to the limitations of cross-sectional research since retention has a longitudinal focus and may be further understood over the course of enrollment in the university. Future researchers may want to focus on this question when examining membership in a Latina sorority. The current study, however, utilized Olivas' findings surrounding Latina sorority membership as a form of social support and a buffer for isolation and discrimination experienced on campus.

Patterson (1998) was also a pioneer in studying Latina sorority membership in order to create a foundation for future studies. In her dissertation study, Patterson conducted a qualitative study at California State University, Chico, in order to explore reasons for joining a Latina sorority and to determine whether academic and social integration occurs as a result of membership in a Latina sorority. Forty-four members of the Alpha (first) chapter were interviewed including several of the Founding Mothers. A total of 27 undergraduate members and 17 alumnae members, most of whom identified as either Mexican or Chicana, participated in the interviews. As a research design, Patterson utilized participant observations and semi-structured interviews consisting of three parts. The first section of the interview included demographic questions, the second concentrated on the participants' experiences as a Latina on a predominantly White campus, and the third part explored the participants' perceptions of what membership in a Latina sorority has meant to her in regards to social experience, academic performance, and career aspirations (Patterson). Once the interviews were concluded and observations completed, Patterson coded the data and created categories. The categories represented themes addressed by participants including (a) transitioning to college, (b) alienation, isolation, and stress, (c) stereotypical views and discrimination, (d) faculty interactions/expectations, and (e) financial concerns.

Patterson (1998) found that members were motivated to join the sorority in order to meet other Latinas and because the organization supported the advancement of Latinas in the community. Additionally, the respondents discussed their desire for cultural and academic support. Several members discussed negative experiences they had with a historically White sorority, therefore seeking out membership in a Latina sorority in order

to find comfort among those with similar backgrounds. Patterson also revealed several themes in regards to the role that the sorority played in these women's lives. Many of the women expressed that the sorority assisted them in making the transition to college, compensated for a lack of academic socialization, provided emotional support, and validated their Latina experience (Patterson). The founders stated that they were cognizant of the unique needs that Latina students have when entering college and searched for ways to fulfill those needs. Respondents also spoke of their ability to become a member of the campus community through participation in the sorority.

Similar to Olivas' (1996) research, Patterson's (1998) study was informative and exploratory but unable to statistically reveal the relationship that membership has to the academic and social integration of Latinas in college. Based on the interviews conducted, Patterson suggested that the sorority supported academic and social integration; however, quantitative studies are also needed to support this claim. The current study sought to expand on Patterson's findings, specifically examining whether membership in a Latina sorority is related to a positive transition to college and serves as a form of support on campus.

In a third study focusing on the phenomenon of Latina sorority membership, Layzer (2000) conducted a critical feminist ethnography at Pennsylvania State University. Over a four semester period, Layzer observed the founding of one chapter of a Latina Greek-letter organization and examined the chapter's struggles to gain recognition on a predominantly White campus. During the first semester, Layzer observed the initial phase of the sorority formation in which a group of women met regularly, planned functions, and spent time together. In the second semester, the women

petitioned the National Board of the sorority for "colony status" on campus and began the

New Member process (Layzer). During the third and fourth semesters, Layzer watched

the community within the sorority develop, the recruitment of new members, and the

initiation of the "Founding Class" and "Alpha Class." The number of participants in

Layzer's study fluctuated between 5 and 21 and included a majority of women with

ethnic origins in Puerto Rico, Mexico, Ecuador, Dominican Republic, and Jamaica. In

addition to her observations, Layzer conducted a series of semi-structured interviews with

the founders and prospective members. She used three theoretical perspectives in her

study including communities of practice theory, feminist poststructuralist theory, and

Gramscian critical theory (Layzer).

Through her observations and interviews, Layzer (2000) analyzed relationships

and personalities of the members in order to gain a deeper understanding of their

espoused beliefs and values. Layzer also sought to explicate motivations for joining the

sorority. Members repeatedly expressed their desire for support through sisterhood and a

desire to fill the cultural gap they perceived as members of an underrepresented group at

a large public institution. Additionally, these Latinas were searching for linguistic

affiliation and cultural solidarity. Layzer proposed that the desire for sisterhood through

sorority membership is the yearning for an alliance of women in an effort to increase

chances of social advancement. This suggests that women join sororities as a method of

combating the oppression of sexism they experience as a group. Furthermore, Layzer

suggested that Latinas join Latina sororities in order to combat the intersection of

oppressions they face as a result of their racial, cultural, and gender identity. As proposed

by Hurtado (1994), many Latino students sense racial tension and discrimination on

campus. Layzer suggested that the positive support and affiliation sought out through membership may be an effort to mitigate the racial tension experienced. Additionally, many of the Latinas in Layzer's study talked about the discrimination they experienced when they expressed interest in a predominantly White Greek-letter organization on campus. Their desire to join a Latina Greek-letter organization, therefore, was motivated by a desire to fit into a Greek organization that accepted them for who they are (Layzer).

Further extending the work of Olivas (1996) and Patterson (1998), Layzer (2000) shed light on a number of factors to be considered when exploring the potential influence of membership in a Latina sorority. Layzer closely examined the role of sisterhood in mitigating the effects of previous oppression experienced by Latinas. The present study further explored the role that Latina sorority membership plays in mitigating these effects.

Summary of Latina Sororities

The literature focusing on membership in a Latina sorority highlights a number of similarities and possible factors for developing a quantitative study. For example, one of the main reasons cited for joining a Latina sorority was a desire for social support (Layzer, 2000; Patterson, 1998). Additionally, these studies revealed that a number of women joined Latina sororities in order to buffer the effects of discrimination and alienation on campus (Layzer; Olivas, 1996). The present study examined the role that social support and perceptions of campus racial climate have on adjustment for Latina students involved in a Latina sorority. Based on the exploratory literature available, it was hypothesized that women involved in a Latina sorority would have high levels of social support and positive perceptions of the campus racial climate. Women involved in

a Latina sorority, therefore, were expected to reflect higher levels of adjustment than women who are not involved in a Latina sorority.

Chapter Summary

This integrative review of the literature has revealed some of the issues and concerns facing Latino college students as they transition to college. Of particular interest were perceptions of campus climate and alienation experienced during transition. Various forms of support were also suggested to assist Latino students in their adaptation to college. Additionally, this literature review focused on Latina students and highlighted their unique needs and concerns. The focus was then turned to Latina sorority membership and its role in aiding Latina students in adjustment and campus integration. This review has been used to lay the foundation from which to develop the current study. Several gaps and discrepancies in the literature have been discussed in order to validate the need for this study. The next chapter will discuss, in detail, the specific research questions, hypotheses, and variables to be examined.

CHAPTER THREE

METHODOLOGY

This chapter provides details of the methodology used in this quantitative study. First, the purpose of the research and hypotheses are stated. Then a description of the research design is provided followed by the sample and instruments employed during data collection. The procedures are then summarized followed by a description of the data analyses. Limitations are also included.

Research Purpose and Hypotheses

The purpose of this study was to explore whether there is a difference in levels of adjustment to college for Latina students who are members of a Latina sorority and those who are not members. Additionally, the purpose of this study was to determine if there is a relationship between perceptions of campus climate, perceptions of social support, and adjustment to college for Latina students who are members of a Latina sorority and those who are not members. Specifically, the study examined whether perceptions of the university environment, family support, general peer support, Latino peer support, faculty support, and institutional support were significant predictors of academic adjustment, social adjustment, personal-emotional adjustment, goal commitment-institutional adjustment, and overall adjustment for members of a Latina sorority and those who are not members. Based on the stated purposes, the following hypotheses were examined:

1. There is no difference in adjustment to college for Latina students who are members of a Latina sorority and those who are non-members.

2. There is no relationship between perceptions of campus climate, perceptions of social support, and adjustment to college for Latina college students who are

members of a Latina sorority after controlling for institutional type, institutional size, and generational status in the United States.

3. There is no relationship between perceptions of campus climate, perceptions of social support, and adjustment to college for Latina college students who are non-members of a Latina sorority after controlling for institutional type, institutional size, and generational status in the United States.

Research Design

A quasi-experimental comparison design was employed for this study. A quasi-experimental design is not a true experiment since it does not include a random assignment of participants to groups, and it is vulnerable to threats to internal validity (McMillan & Schumacher, 2001). Specifically, a nonequivalent groups posttest-only design was utilized which, according to McMillan and Schumacher, does not require a pretest to be administered and includes two groups possessing different characteristics. The major difference between the two groups was membership in a Latina sorority; therefore, members of a Latina sorority were placed into one group while non-members were used as a comparison group. Using a comparison group allowed the researcher to explore the first hypothesis proposed.

The research design was also a multivariate correlation design which allowed the researcher to examine the relationship between a series of independent and dependent variables. It also allowed the researcher to compare the levels of adjustment to college for the sorority member group to the comparison group. The six independent variables included perceptions of family support, general peer support, Latino peer support, faculty support, and institutional support as well as perceptions of the university environment.

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Five dependent variables were examined separately including academic adjustment, social adjustment, personal-emotional adjustment, goal commitment-institutional adjustment, and overall adjustment. Multiple regression was used since it "allows the researcher to 'control' for selected variables to determine the relationship between the remaining independent variables and the dependent variable" (McMillan & Schumacher, 2001, p. 295). Institutional type, institutional size, and generational status in the United States, therefore, were included as "control" variables. These variables were chosen since a number of researchers have suggested that they relate to Latino students' levels of college adjustment (Fiske, 1988; Hurtado et al., 1996; Schlossberg, 1981; Schneider & Ward, 2003).

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

A sample of Latina college students attending a variety of institutions nationwide was utilized for this study. The sampling technique employed was a two part process consisting of cluster sampling and snowball sampling. The first group, "sorority member group," included Latina college students currently involved in a Latina sorority. The comparison group, "non-sorority member group," included Latina college students not currently involved in a Latina sorority.

The sorority member group was generated using a combination of cluster sampling and snowball sampling. First, the cluster sample was generated from one Latina sorority. Lambda Theta Alpha Latin Sorority, Inc. is a nationally recognized organization consisting of 69 undergraduate chapters, 8 alumnae chapters, and 4 graduate chapters in a number of states including New Jersey, Connecticut, New York, California, Arizona, Texas, and Florida (*Lambda Theta Alpha Chapters by Name*, 2003). A majority of the

undergraduate chapters are located at midsize to large public institutions (*Lambda Theta Alpha Chapters by Name*). A cluster sample of current undergraduate members was generated from an "Active Sister List" maintained by the National Board of Directors of the sorority. Graduate and alumnae members were not included in the sample since the study focused on current undergraduate students. Cluster sampling was chosen since membership conveniently identifies a naturally occurring, cohesive group (McMillan & Schumacher, 2001). Additionally, it is a type of probability sampling that is efficient with large populations and is generally low in cost (McMillan & Schumacher). It is, however, less accurate than simple random sampling (McMillan & Schumacher) but was utilized since it was difficult to obtain a list of all active undergraduate members of all Latina sororities currently in existence. One limitation of cluster sampling is that respondents in the cluster may have similar within-group characteristics since they are members of the same Latina sorority; however, the second sampling technique utilized opened the sorority member group to different Latina sorority members.

A snowball sampling technique was used to identify the comparison group as well as increase the size of the sorority member group. Snowball sampling, sometimes called network sampling, is a strategy used in order to identify a list individuals who do not form a naturally bounded group (McMillan & Schumacher, 2001). In snowball sampling, each participant is asked to identify a successive participant to be included in the study based on a number of characteristics (McMillan & Schumacher). Snowball sampling is typically utilized in qualitative research and in-depth interviews; however, it was used in the present quantitative study in order to identify a usable comparison group. Two methods were used to obtain a snowball sample. First, each respondent from the sorority

member group was asked to identify five names and e-mail addresses of people who possess the following characteristics: (a) are non-members of any Latina sorority, (b) self-identify as Latina, and (c) are currently enrolled as undergraduate students. These characteristics were chosen in order to obtain a comparison group that possessed similar demographic characteristics as the sorority member group. From the names and e-mail addresses identified, a comprehensive list of Latinas who are not currently members of any existing Latina sorority was generated. The respondents from the comparison group were also asked for referrals so the list grew exponentially with each response. The second method used was to contact student affairs administrators at a variety of institutions nationwide to request referrals for the comparison group. The student affairs administrators were identified through ACPA's Latin@ Network. Similar to the referrals requested of respondents, administrators contacted were asked to share names and email addresses of current Latina undergraduate students. Referrals from administrators were also added to the comprehensive list of non-sorority members. The student affairs administrators were also sent the survey and letter requesting participation in order to directly send to a number of Latina students who met the criteria. In doing so, a large number of sorority and non-sorority members received the request for participation.

In order to utilize a multiple regression analysis, a minimum of 10 cases per variable are required (K. Inkelas, personal communication, December 1, 2004). Since this study included nine independent variables and one dependent variable, it was necessary to obtain at least 100 usable responses per group. The original sample for the sorority member group consisted of 404 active undergraduate members (as of February 20, 2005). In order to obtain the necessary number of usable responses from the sorority member

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group, all active undergraduate members of the sorority were included in the sample. When the survey was sent to the sorority member group, 35 e-mail accounts were inactive or incorrect, therefore the size of the sorority member group dropped to 369. From the original sorority member group, a total of 106 usable responses were completed, equaling a 28.7% response rate. From the referral group, 77 usable responses were completed by Latina students who are members of a Latina sorority, taking the total sample size for the sorority member group to 183. For the comparison group, all names submitted by both respondent groups as well as referrals from administrators were included in the sample. Due to the nature of the snowball sampling technique utilized, it was difficult to estimate the total sample size and response rate of the comparison group. The usable responses for the comparison group totaled 131. Nearly 50% of the surveys that were opened were not completed and could not be considered usable responses.

Of the 183 respondents in the Latina sorority member group, 100 identified as Mexican/Mexican American/Chicana (55%), 16 as Puerto Rican (9%), 3 as Cuban/Cuban American (2%), 11 as Dominican/Dominican American (6%), 11 as Central American (6%), 8 as South American (4%), and 34 identified as multi-ethnic Latina (18%). The non-sorority member group, consisting of 131 respondents, included 62 identified as Mexican/Mexican American/Chicana (47%), 10 as Puerto Rican (8%), 5 as Cuban/Cuban American (4%), 5 as Dominican/Dominican American (4%), 10 as Central American (8%), 14 as South American (11%), and 25 identified as multi-ethnic Latina (18%). Other demographic information about the sample, including generational status in the United States, is included in Table 3.1. Table 3.2 provides institutional characteristics about the respondents.

Table 3.1

Latina Sorority and Non-Sorority Member Demographic Information

| | Latina Sorority Members | | Latina Non-Sorority Members | |
	N	%	N	%
Ethnicity				
Mexican/Mexican				
American/Chicana	100	55%	62	47%
Puerto Rican	16	9%	10	8%
Cuban/Cuban American	3	2%	5	4%
Dominican/				
Dominican American	11	6%	5	4%
Central American	11	6%	10	8%
South American	8	4%	14	11%
Multi-Ethnic Latina	34	18%	25	18%
Generational Status in the U. S.				
Foreign Born	34	19%	25	19%
First Generation	82	45%	42	32%
Second Generation	45	25%	44	34%
Third or More				
Generation	21	11%	19	15%
College Generational Status				
First Generation	103	56%	79	44%
Second Generation or More	80	44%	52	56%
Transfer Status				
Transfer Student	22	12%	22	20%
Non-Transfer Student	159	88%	108	80%
Years Enrolled at Institution				
First Year	13	7%	39	30%
Second Year	36	20%	32	24%
Third Year	52	28%	30	23%
Fourth Year	61	33%	26	20%
Fifth Year	16	9%	3	2%
Sixth or More Year	5	3%	1	1%

Note: Two respondents did not indicate generational status in the U.S. One respondent did not indicate college generational status. Three respondents did not indicate transfer status. Generational status in the U.S. based on the following: (a) first generation if respondent born in the U.S., (b) second generation if respondent's parent(s) born in the U.S., (c) third generation if respondent's grandparents born in the U.S. College generational status based on mother and father's education with some college or more indicating respondent is second generation.

Table 3.2

Latina Sorority and Non-Sorority Member Institutional Characteristics

| | Latina Sorority Members | | Latina Non-Sorority Members | |
	N	%	N	%
Institutional Type:				
Public 4-Year University	142	79%	76	58%
Private 4-Year University	37	21%	55	42%
Institutional Size:				
0 - 9,999 students	29	16%	28	22%
10,000 - 19,999 students	28	16%	41	31%
20,000 - 29,999 students	37	20%	23	18%
30,000 – 39,999 students	47	26%	22	17%
40,000 – 49,999 students	40	22%	16	12%

Note: Four respondents did not indicate institutional type. Three respondents did not indicate institutional size.

A review of the demographic characteristics of both groups reveals a few differences worth highlighting. First, it appears as though a larger percentage of sorority members (56%) are first generation college students compared to the non-sorority group (44%). Although college generational status was not included in the inferential analyses, this could indicate that first generation college students are more likely than second generation college students to join a Latina sorority. As argued by Throgmorton (1999) Latino/a students are likely to search for mentors and support on campus when they a first generation college students. Generational status in the United States was also slightly different for each group. Again, the sorority member group had a higher percentage (45%) of first generation respondents than the non-sorority group (32%). Another interesting finding was that a larger percentage of non-sorority members (30%) were first-year students in comparison to the sorority member group (7%). This could be based on membership requirements of the sorority specifically related to minimum credit hours required in order to join. In regards to institutional characteristics, a larger number of non-sorority members attended a private institution (42%) in comparison to the sorority member sample (21%).

<center>Instrumentation</center>

Perceptions of Campus climate

The University Environment Scale (UES) developed by Gloria and Kurpius (1996) was used to measure perceptions of campus climate (Appendix B). The UES is a 14-item instrument used to measure racial and ethnic minority students' concerns for and perceptions of the university environment. Respondents use a seven-point Likert-type scale ranging from (1) Not at all to (7) Very true. The instrument is scored by adding

together the individual 14 responses in order to get a total sum score. Five items on the

scale are written so that they are reverse scored, therefore minimizing the likelihood of

obtaining a response set (Gloria & Kurpius). The reverse scored items are reverse coded

and then added with the other nine responses for a total sum score. The total scores may

range from 14 to 98, with higher scores indicating positive student perceptions of the

university environment. In the current study, however, the direction of the scale was

flipped in order to maintain consistency with the direction of the scales of the other two

instruments, therefore, a higher score indicated a negative perception of the university

environment.

Two samples of racial/ethnic minority students at a large Southwestern university

were recruited to pilot test the UES and the Cultural Congruity Scale (CCS), also

developed by Gloria and Kurpius (1996). The CCS is a 13-item scale used to assess

Chicano/a sense of cultural fit on a campus with different cultural values, beliefs, and

attitudes. Following the pilot tests, Gloria and Kurpius determined the predictive validity

of the instruments using two samples of Chicano/a students enrolled at the University of

California, Irvine and Arizona State University. From the pilot studies, internal

consistency for the UES was established with a Cronbach's alpha of .84 (Gloria &

Kurpius). Similarly, the internal consistency of the UES was determined from the validity

sample with a Cronbach's alpha coefficient of .84 so the two alphas were the same?

(Gloria & Kurpius). The UES alpha coefficient for the present study was .81. To establish

predictive validity for the decision to persist, Gloria and Kurpius employed regression

analyses and found that cultural congruity accounted for 11% of the variance in academic

persistence while perceptions of the university environment accounted for 25% of the variance in persistence.

Although Gloria and Kurpius (1996) suggested using the CCS and UES instruments concurrently, the present study only used the UES to measure perceptions of campus climate since the UES predicted a larger percentage of the variance in persistence. As noted by the authors, the CCS and UES instruments are significantly correlated and account for 26% of the total variance in persistence explained, with 24% of the variance explained by perceptions of the university environment (Gloria & Kurpius). The decision to exclude the CCS was also made in order to minimize the length of the survey used in the current study. A limitation noted by the authors was that Chicana women outnumbered Chicano men by three to one in the sample, thus affecting the authors' ability to generalize across gender (Gloria & Kurpius). The current study, however, was focused on women so this limitation was not a major concern. Another concern is that the UES instrument was validated using a sample of Chicano/as from the Southwest whereas the current study was administered to a sample of Latina students nationwide who may identify with a range of ethnicities besides Chicana. Additionally, the UES was determined to have a high predictive validity for academic persistence whereas the current study examined adjustment.

Perceived Social Support

Perceived social support was measured using a 46-item scale developed by Schneider and Ward (2003) (Appendix A). The instrument was developed in order to assess Latino students' perceptions of family support, general peer support, Latino peer support, faculty support, and institutional support at a midsize liberal arts institution in

upstate New York. Respondents rate items on the instrument using a seven-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree; however, the scale direction was reversed for the present study in order to maintain consistency with the direction of the scales of the other two instruments. Schneider and Ward averaged the response scores in order to obtain a mean score between one and seven. The coefficient alpha, as a measure of internal consistency, was determined to be .83 for the instrument scores. Internal consistency, also referred to as reliability, implies that the instrument is ideally free from error and will yield similar responses across various situations (McMillan & Schumacher, 2001). Schneider and Ward also calculated coefficient alpha scores for each subscale, yielding .83 for perceived family support (8 items), .84 for general peer support (8 items), .77 for Latino peer support (6 items), .73 for faculty support (11 items), and .80 for institutional support (13 items). Coefficient alpha scores of .70 to .90 are generally accepted as strong predicators of reliability (McMillan & Schumacher). The present study found alpha coefficients of .89 for the social support full scale, .79 for institutional support subscale, .81 for the faculty support subscale, .80 for the Latino peer support subscale, .76 for the general peer support subscale, and .82 for the family support subscale. Table 3.3 is a summary of the items found in each subscale.

The instrument was advantageous for the current study since Schneider and Ward (2003) specifically tested and validated it on a sample of Latino students. Pope, Reynolds, and Mueller (2004) noted that it is important to establish instrument reliability and validity for specific ethnic minority populations in order to ensure content sensitivity

Table 3.3

Perceived Social Support Subscales

General Peer Support

The friendships I have developed on campus are personally satisfying

I can count on my friends for support

I do not feel comfortable with most of the students on this campus

Few of the students that I know on campus would be willing to listen to me and help me if I had a personal problem

My interpersonal relationships with others on campus have had a positive influence on my personal growth, attitudes and values

It has been difficult for me to meet and make friends with other students on campus as a function of my ethnicity

My interpersonal relationships with other students on campus have had a positive influence on my intellectual growth and interest in ideas

I am completely comfortable talking about personal issues with the friends that I have on campus

Family Support

I think that my family helps me out financially as much as they can

If I needed my family for support and understanding, they would be there for me

My family was not supportive of my decision to attend the university I am at

My family really doesn't understand the college environment and the type of stress I am under

My family would give me advice about my academic program and possible career choices if I asked for it

I can not look to my family for support when things at school get stressful

My family often asks me to do things for them that interfere with my life at college

My family listens and shows interest in my life at school

Latino Peer Support

Most of my friends are not Latinos

Participating in Latino orientated groups and activities is not an integral aspect of my life on campus

It's not important for me to go to Latino orientated groups and events

I don't think I fit with the Latinos on campus

I feel like Latino student clubs adequately address the ethnic issues that I am most interested in

I would feel comfortable and accepted if I became involved in the Latino student organizations on campus

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Table 3.3 (continued)

Perceived Social Support Subscales

Faculty Support

I do not feel close to any faculty or staff members on campus

Minority faculty members actively speak up on the behalf of the needs of Latino students

Many of the faculty members that I have contact with are genuinely interested in my point of view

Issues related to my experience are not addressed in the classroom

I believe many faculty members understand my point of view

The low number of minority faculty makes me feel under-represented on this campus

I don't feel like my perspective is relevant and validated in the classroom

I feel that there are professors that I could go to when I have personal issues related to my ethnicity

I think that many professors and/or staff on campus have positive images of Latino students

I don't feel that there are an adequate number of minority professors on this campus

I can relate to the issues and topics discussed in class

Institutional Support

I often feel uncomfortable in classes because there are relatively few minorities

The school provides adequate counseling services to help Latino students adjust to the campus

There are adequate tutoring centers on campus to meet my academic needs

The school provides an adequate number of Latino speakers and cultural group throughout the year

There needs to be a stronger Latin-American Studies program at my university

I feel the administration is sympathetic to the needs of Latino students

If I needed to, I would feel comfortable using the counseling center on campus

There are not enough resources available in the library for serious Latino studies

Latino culture is recognized and respected on this campus

I have found the administration easily accessible when I wanted to address a concern

The administration does an adequate job of recruiting Latino freshmen and transfers to my university

There are not any doctors or health care practitioners that I would feel comfortable going to in the health center

I do not feel uncomfortable being helped by a White health care practitioner at the health center

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and understanding across the ethnic minority group being sampled. Latino culture is typically considered a collective cultural group which could ultimately affect the way members interpret certain constructs (Pope et al.).

There are several limitations worth noting in regards to Schneider and Ward's perceived social support instrument. One limitation is that the original respondents were attending a liberal arts college in upstate New York whereas the current study was administered to a sample of Latina students enrolled at a variety of universities across the United States. This is an important limitation to note since the percentages of specific Latino groups residing in certain areas fluctuate depending on the geographic location. For example, Torres (2004) noted that many Puerto Ricans first migrated to New York and have remained heavily populated in the Northeast. In addition to location of the institution, other factors including socioeconomic status, attitudes, and behaviors may vary based on the type of institution attended by the respondent. Another limitation of the instrument is the use of double-barreled questions. Double-barreled questions contain two or more ideas and should be avoided since the respondent may address each idea differently if given the opportunity (McMillan & Schumacher, 2001). A final limitation is that validity was not reported for this instrument, thus questioning whether it measures what it purports to measure. As argued by McMillan and Schumacher, testing for validity requires the researcher to make assumptions about what the instrument will measure prior to collecting evidence to support the stated assumptions.

Adjustment to College

Adjustment to college was measured using the Student Adaptation to College Questionnaire (SACQ) developed by Baker and Siryk (1984) (Appendix C). The SACQ

is a 67-item self-report instrument used to assess how well first-year students are adapting to college. Students respond to the instrument using a nine-point Likert-type scale ranging from (1) Applies very closely to me to (9) Doesn't apply to me at all. The SACQ has four subscales that measure academic adjustment (24 items), social adjustment (20 items), personal emotional adjustment (15 items), and goal commitment-institutional adjustment (15 items). The total item count is 74 since several items appear on more than one scale (Asher, n.d.). The SACQ can either be scored by hand or by computer. By hand, the respondent completes a self-scoring sheet by entering individual answers to each item into corresponding boxes on the sheet. The boxes represent items that are to be included in individual subscales. Items 1 through 33 are entered into five columns of boxes labeled A through E and items 34 through 67 are entered into five columns of boxes labeled A` through E` (Baker & Siryk, 1999). A total score is calculated for each column A through E and A` through E` (Baker & Siryk). The Full Scale score is equal to A plus A`, the Academic Adjustment score is equal to B plus B`, the Social Adjustment score is equal to C plus C`, the Personal-Emotional score is equal to D plus D`, and the Attachment score is equal to E plus E` (Baker & Siryk). After calculating the sums for each subscale, t-scores can be determined for each subscale in order to generalize the scores. This allows the researcher to compare scores across subscales. The present study utilized SPSS to score the SACQ based on the self-scoring sheet. Table 3.4 includes sample items that are included in each subscale.

A number of institutions have used the SACQ scales and reported a range of high Cronbach's alpha coefficients as evidence of reliability (Asher). Full Scale reliability is reflected in the range of coefficient alpha scores from .92 to .95 (Asher), which

Table 3.4

Sample Items Included in SACQ Subscales

Academic Adjustment
    I have been keeping up to date in my academic work
    I haven't been very efficient in the use of study time lately
    I'm quite satisfied with my academic situation at college

Social Adjustment
    I feel that I fit in well as part of my college environment
    I am satisfied with the extracurricular activities available at college
    I am quite satisfied with my social life at college

Personal-Emotional Adjustment
    Lately I have been feeling blue and moody a lot
    Being on my own, taking responsibility for myself, has not been easy
    I am experiencing a lot of difficulty coping with the stresses imposed on me in college

Goal Commitment-Institutional Adjustment
    I have had informal, personal contacts with my college professors
    I am pleased now about my decision to go to college
    I enjoy living in a college dormitory

Note: Material for the SACQ copyright © 1989 by Western Psychological Services. Adapted for specific, limited research use by G. Garcia, University of Maryland, College Park, by permission of the publisher, Western Psychological Services, 12031 Wilshire Boulevard, Los Angeles, California 90025, U.S.A. (www.wpspublish.com). No additional reproduction, in whole or in part, by any medium or for any purpose, may be made without prior, written authorization of Western Psychological Services. All rights reserved.

represent a high level of internal consistency. The subscale reliabilities, as measured by Cronbach's alpha, range from .73 to .79 for personal-emotional adjustment, .83 to .89 for social adjustment, .82 to .87 for academic adjustment, and .84 to .88 for goal commitment-institutional adjustment (Baker & Siryk). The present study determined internal consistency with the following Cronbach's alpha coefficients: (a) .94 for the full scale, (b) .89 for the academic adjustment subscale, (c) .83 for the social adjustment subscale, (d) .89 for the personal-emotional adjustment subscale, and (e) .85 for the goal commitment-institutional adjustment subscale.

Evidence of validity of scores for the SACQ scales has been determined in a number of ways including intercorrelations of .7 and .8 between the subscales and the Full Scale (Asher, n.d.). Researchers in a number of institutions have also conducted one factor principle component analyses and reported large loadings for each variable (Asher). Various studies at institutions such as the University of California, Los Angeles and Clark University have provided evidence for strong correlations between the Full Sale and subscales in predicting a number of outcomes. For example, the academic adjustment scale was found to be positively correlated with first year GPA at Clark University while the goal commitment-institutional adjustment scale was negatively correlated with attrition (Asher).

One limitation of the SACQ is that it was designed to be administered within the first six weeks of school; therefore, it may be limited in its ability to measure long-term adjustment to college. A number of researchers (Hurtado et al., 1996; Schneider & Ward, 2003; Zea et al., 1995), however, have used the instrument to measure adjustment at

various points throughout the school year despite this limitation The SACQ is also a commercial instrument; therefore, it is costly to acquire and utilize.

Once the three instruments were merged for the present study, the Likert-type scale of the UES instrument and the instrument measuring social support were reversed in order to maintain consistency with the direction of the SACQ Likert-type scale. This was done to avoid any respondent confusion during data collection. Table 3.5 shows a summary of the coding used for the scales and demographic variables collected.

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

A web-based survey created using Survey Monkey was used to collect data. Since this study was distributed to Latina students nationwide, a web-based survey was chosen in order to decrease the costs associated with a mail survey and increase the efficiency of data input. As suggested by Cook, Heath, and Thompson (2000) a web-based survey can be advantageous for economical and methodological purposes. A web-based survey was also beneficial because it allowed the respondent to answer the survey at her own pace (Cook et al.). As argued by Carini, Hayek, Kuh, Kennedy, and Ouimet (2003), the response rate of a web-based survey is similar to the response rate of a paper survey, therefore the use of a web-based survey is justifiable. Limitations are also present with web-based surveys including the possibility of incorrect e-mail addresses, respondents' lack of access to the web, or e-mail bounce backs. Since the Internet is a public domain, data may be intercepted, causing a threat to confidentiality. To reduce this threat, students were cautioned of this risk and asked to close their Internet browser upon completion of the survey. A security encrypted website was also used to reduce this risk. Prior to data collection a pilot sample was used to test the web-based survey. The pilot sample

Table 3.5

Summary of Instrument Coding

Variable	Scale
Perceptions of Social Support	Likert: Strongly Agree=1, Neither Agree nor Disagree=4, Strongly Disagree=7
Perceptions of Campus Climate (UES)	Likert: Very True=1, Not at All=7
Adjustment (SACQ)	Likert: Applies Very Closely to Me=1, Doesn't Apply to Me at All=9
Sorority Membership	Yes=1, No=2
Ethnicity	Mexican/Mexican American/Chicana=1, Puerto Rican=2, Cuban/Cuban American=3, Dominican/Dominican American=4, Central American=5, South American=6, Multi-Ethnic Latina=8
Generational Status in the United States	Third or More Generation=1, Second Generation=2, First Generation=3, Foreign Born=4, 5, or 6
Mother's Education	First Generation=1, Second Generation=2-8
Father's Education	First Generation=1, Second Generation=2-8
Transfer Status	Yes=1, No=2
Years at Institution	First Year=1, Second Year=2, Third Year=3, Fourth Year=4 Fifth Year=5, Sixth or More Year=6
Institution Type	Public 4-Year College/University=0 Private 4-Year College/University=1
Institution Size	0-9,999=1; 10,000-19,999=2; 20,000-29,999=3; 30,000-39,999=4; 40,000-49,999=5

Note: Ethnicity also included White (7) and Other (8); respondents who identified as White were eliminated from the sample since the study is focused on Latina students. The "Other" category was changed to "Multi-Ethnic Latina" to include those who identified as Latina and other ethnicities or a combination of two or more Latina ethnicities. See table 3.1 information on U.S. generational status and college generational status.

consisted, of two self-identified Latina undergraduate students and two Latina graduate students at a large public institution in the Mid-Atlantic region. None of the students chosen for the pilot sample were included in the research sample and none were members of a Latina sorority. Graduate students were included in the pilot sample to provide methodological feedback regarding the design of the web-based survey. The pilot sample was used to ensure that the web-based survey was accessible through the provided URL link, to check for clarity of survey items, and to verify that responses were received by the researcher once the web-based survey was submitted. As suggested by McMillan and Schumacher (2001), space was also provided for respondent comments about the survey.

Once the pilot web-based survey was completed, data collection began on March 6, 2005. The sorority member group was sent an invitation to participate (Appendix G) via e-mail. The invitation to participate described the purpose of the study, the time required to complete the survey, offered the respondent an incentive for completing the survey, ensured confidentiality, and included a direct URL link that connected the respondent to the informed consent page of the web-based survey. The informed consent page (Appendix F) provided the respondent with her rights as a participant including her right to ask questions, discontinue the survey, or request results of the study. The respondent was required to accept the informed consent statement before proceeding with the survey. If she chose not to accept, she was taken to a final page thanking her for her consideration. Those respondents who accepted the informed consent statement were asked to complete 127 questions in the survey (Appendices A-C). They were also asked 7 demographic questions regarding membership status in a Latina sorority, the number of

years at her institution, transfer status, college generational status, generational status in the United States, and ethnicity (Appendix D). Two institutional data questions were also included to determine the type and size of institution attended by the respondent. Respondents were also given the opportunity to make comments at the end of the survey. The survey was estimated to take approximately 20 minutes to complete. The respondent was informed that she could exit the survey and return to the same location at a later time if necessary.

Once completed, the respondent was taken to a final page thanking her for participating (Appendix E). The respondent was also given further information about providing referrals for the comparison group and qualifying for the incentive. There was a series of incentives offered to the sorority member respondents. First, there were five $15 gift certificates to a Greek paraphernalia store given to the first five respondents. Then, respondents who wanted to be included in the raffle were given the chance to win gift certificates ranging from $25-$100. There was one $25 gift certificate awarded, one for $50, and one for $100. Those respondents who wanted to be entered were asked to provide their e-mail address for inclusion in the raffle. This step was taken to ensure confidentiality. The final page of the web-based survey also asked the sorority member respondent for comparison group referrals and informed her that she could receive additional entries into the raffle by providing referrals. Each referral made was an additional entry into the raffle. The incentive was offered in hopes of increasing the response rate as well as increasing the number of referrals made for the comparison group. In conclusion, the respondent was asked to close her web-browser once she completed the survey to decrease the chances of data being intercepted.

A follow-up e-mail was sent to the sorority member group one week following the invitation to participate (Appendix I). A second and final reminder was sent two weeks following the initial contact (Appendix K). Reminder e-mails were also sent to respondents who started the survey but did not complete it to inform them that they could return to the survey at any time. As suggested by Cook, Heath, and Thompson (2000) the number of contacts made will increase the response rate for a web-based survey. Three weeks were allotted for data collection for the sorority member group.

A similar procedure was followed for the comparison group. The comparison group, however, was offered the chance to win cash prizes as opposed to gift certificates to a Greek paraphernalia store. The first five respondents received $15 cash while the raffle winners received cash ranging from $25-$100. There was one $25 cash prize offered, one $50 cash prize, and one $100 cash prize. Data collection for the comparison group began one week following the sorority member group on March 13, 2005 since the researcher was awaiting referrals. The invitation to participate (Appendix H) was sent to the first group followed by two follow-up emails (Appendices J and L). The researcher then sent out invitations to participate on a rolling basis as referrals were made by successive responders and student affairs professionals. Data collection for the comparison group continued for three weeks. In the second week, student affairs administrators at a number of institutions were sent the invitation to participate. Each administrator directly sent the invitation to current Latina undergraduate students. Data collection for the comparison group lasted three weeks although, in total, data collection for both groups lasted four weeks and ended on April 3, 2005. All raffle winners were contacted on April 10, 2005.

Data Preparation

In order to prepare the data for statistical procedures, a few preliminary actions were taken. First, a missing values analysis was conducted. For the social support scales, several questions had one or two missing values while two questions (23, 45) had four missing values. The missing values analysis did not indicate a significant effect on the data. Missing scores, however, were replaced with the individual's mean score on individual subscales. The same procedure was done for the University Environment Scale. The SACQ instructed the respondent to skip two questions (26, 33) if she did not live on campus. Those two questions, therefore, had a large number of missing values. As instructed by the scoring manual, the values were not replaced with mean scores from the subscales. Other missing values in the SACQ, however, were replaced with the individual's mean scores on individual subscales.

The second preliminary action taken was to assess internal consistency of the instruments. Reliability for each instrument was verified using Cronbach's coefficient alpha generated by SPSS. The full scale and subscales were both analyzed to confirm the internal consistency of all the scales. A coefficient alpha of .70 or higher was considered reliable. Once these steps were taken, data analysis began.

Data Analysis

Cross sectional data analyses were conducted using SPSS software. A significance level was set at $p < .05$. First, frequencies and cross-tabs were calculated for the seven demographic variables and two institutional data variables. The frequencies and cross-tabs were used for descriptive purposes. Next, the three hypotheses were tested using a number of inferential statistic techniques.

The first hypothesis, that there is no difference in adjustment to college for Latina students who are members of a Latina sorority and those who are non-members, was analyzed using a multivariate analysis of variance (MANOVA). A MANOVA procedure is utilized to compare two groups when there is a significant intercorrelation between dependent variables (McMillan & Schumacher, 2001). MANOVA was chosen for the current study, assuming intercorrelation would be present. Five adjustment levels for both the sorority member group and the comparison group were entered into a MANOVA equation in order to determine if there was a significant difference in each type of adjustment based on membership in a Latina sorority.

The remaining two hypotheses were tested using a series of multiple regression analyses. Multiple regression is a multivariate correlation technique which can be used to predict how a number of independent variables relate to a dependent variable (McMillan & Schumacher, 2001). Multiple regression is a powerful statistical tool because it is versatile, can be used in a number of different situations, and allows the researcher to control certain variables depending on the order of input (McMillan & Schumacher). It must be cautioned, however, that a multiple regression analysis does not imply a cause and effect relationship between variables (Huck & Cormier, 1996). To allow the researcher to enter the independent variables based on a common theoretical sequence, blocked hierarchical regression was used (Lomax, 2001). Prior to running the multiple regression analyses, intercorrelation matrices were completed for perceptions of campus climate, perceptions of social support, and the three control variables in order to test for multicollinearity. Multicollinearity implies there is an overlap of two or more of the

predictor variables being entered into the multiple regression equation (Borg & Gall, 1989).

A total of ten multiple regression analyses were completed using the following order of entry for the independent variables. First, the three control variables (institutional type, institutional size, and generational status in the United States) were entered as a block. Institutional type was coded using dummy variables since it represented nominal data while generational status and institutional size were considered continuous. Second, the measure of perceptions of campus climate (university environment) was entered as a block. The third block included the five measures of social support (family, general peer, Latino peer, faculty, and institutional). The order of entry was similar to a study conducted by Schneider and Ward (2003) in which hierarchical regression was used to determine the mediator effect of social support on ethnic identification and adjustment. Social support, therefore, was entered last in order to explore the possibility that it may alter the relationship of perceptions of campus climate and adjustment. In order to assess the level of variance in adjustment explained by the nine independent variables, five different multiple regression analyses were conducted for both the sorority member group and the comparison group. For the sorority member group, the order of entry was repeated five times using a different form of adjustment each time. For the comparison group, the same order of entry was repeated five times for each dependent variable. The five dependent variables were academic adjustment, social adjustment, personal emotional adjustment, goal commitment-institutional adjustment, and overall adjustment.

Chapter Summary

The purpose of this study was to examine the relationship of perceptions of campus climate, perceptions of social support, and adjustment to college for Latina college students who are members of a Latina sorority and those who are not members. A two part sampling technique included cluster sampling and snowball sampling, yielding a sorority member group and a comparison group. The instruments used included the University Environment Scale (Gloria & Kurpius), scales of perceived social support (Schneider & Ward, 2003), and the Student Adaptation to College Questionnaire (Baker & Siryk, 1984). The research design used was a quasi-experimental, multivariate correlation design. A web-based survey was used to collect data. Data analysis techniques included MANOVA and multiple regression analyses. In the next chapter, results of the descriptive statistical analyses and inferential statistical analyses are presented.

CHAPTER FOUR

RESULTS

The purpose of this study was to ascertain whether or not there was a difference in

levels of adjustment to college for Latina students who are members of a Latina sorority

and those who are not members. Moreover, this study examined whether there was a

relationship between perceptions of campus climate, perceptions of social support, and

adjustment to college for Latina students who are members of a Latina sorority and those

who are not members. Specifically, this study controlled for institutional type,

institutional size, and generational status in the United States in order to examine the

relationships of perceptions of the university environment, family support, general peer

support, Latino peer support, faculty support, and institutional support with academic

adjustment, social adjustment, personal-emotional adjustment, goal commitment-

institutional adjustment, and overall adjustment for members and non-members of a

Latina sorority. This chapter provides details of the results of inferential statistical

analyses conducted on the three hypotheses.

Preliminary Analyses

Prior to conducting statistical analyses for the three hypotheses, means and

standard deviations were calculated for the two continuous control variables (institutional

size, generational status in the U. S.), six independent variables (perceptions of the

university environment, family support, general peer support, Latino peer support, faculty

support, institutional support), and five dependent variables (academic adjustment, social

adjustment, personal emotional adjustment, goal commitment-institutional adjustment,

overall adjustment). Table 4.1 provides a summary of the descriptive statistics.

Table 4.1

Descriptive Statistics for Latina Sorority and Non-Sorority Members (N=314)

Membership	Sorority		Non-Sorority	
	M	*SD*	*M*	*SD*
Control Variables:				
Institutional Size[1]	3.23	1.37	2.67	1.31
Generational Status in the United States[2]	2.79	1.04	2.62	1.08
Independent Variables:				
University Environment Scale[3]	38.61	11.70	38.46	12.52
Institutional Support[4]	3.81	.93	3.64	.92
Faculty Support	3.87	.87	3.70	1.04
Latino Peer Support	2.30	1.01	3.49	1.35
General Peer Support	2.38	.78	2.61	1.03
Family Support	2.66	1.28	2.40	1.06
Dependent Variables:				
Academic Adjustment[5]	49.63	9.47	50.52	10.71
Social Adjustment	52.04	8.79	47.16	10.90
Personal-Emotional Adjustment	49.71	9.32	50.40	10.90
Goal Commitment-Institutional Adjustment	51.18	8.62	48.35	11.48
Overall Adjustment	50.55	9.13	49.22	11.09

[1] Institutional size ranged from 1-5; 1 = small, 5 = large
[2] Generational status ranged from 1-6; 1 = third or more, 2 = second, 3 = first, 4-6 = foreign born
[3] University Environment Scale ranged from 14-98; 14 = positive perception, 98 = negative perception
[4] All social support scales ranged from 1-7; 1 = more support, 7 = less support
[5] SACQ scales used standardized t-scores with a mean of 50; low score = less, high score = more

Adjustment: Sorority and Non-Sorority Members

The first analysis conducted was used to test for difference in adjustment levels based on membership in a Latina sorority. Specifically, the null hypothesis stated that there is no difference in adjustment to college for Latina students who are members of a Latina sorority and those who are non-members. Using multivariate analysis of variance (MANOVA), adjustment levels were compared using membership as the independent variable and academic adjustment, social adjustment, personal-emotional adjustment, goal commitment-institutional adjustment, and overall adjustment as the dependent variables.

Results of the MANOVA indicated that there was a significant difference in adjustment levels for Latinas who are members of a Latina sorority and those who are non-members, Wilks' $\Lambda = .87$, $p < .001$. The null hypothesis, therefore, was rejected. Further analysis of the tests of between-subjects effects revealed that members ($M = 52.04$, $SD = 8.79$) have significantly higher social adjustment levels than non-members ($M = 47.16$, $SD = 10.90$) ($p < .001$). Additionally, members ($M = 51.18$, $SD = 8.62$) have significantly higher levels of goal commitment-institutional adjustment than non-members ($M = 48.35$, $SD = 11.48$) ($p < .05$). There was no significant difference between the groups for academic adjustment, personal-emotional adjustment, or overall adjustment. The results are summarized in Table 4.2. Since there was a significant difference between the groups, regression analyses were conducted separately for the sorority and non-sorority group. As an ancillary analysis, a MANOVA was conducted to test for differences between perceptions of campus climate and perceptions of social support between the two groups. Table 4.3 summarizes the results.

Table 4.2

Follow-up ANOVA Results: Adjustment by Sorority Membership (N=314)

Membership	Sorority		Non-Sorority			
	M	*SD*	*M*	*SD*	*F (df)*	*p*
Academic	49.63	9.47	50.52	10.71	.60 (1, 313)	.440
Social	52.04	8.79	47.16	10.90	19.23 (1, 313)	.001*
Personal-Emotional	49.71	9.32	50.40	10.90	.36 (1, 313)	.548
Goal Commitment	51.18	8.62	48.35	11.48	6.26 (1, 313)	.013*
Overall	50.55	9.13	49.22	11.09	1.35 (1, 313)	.246

Table 4.3

Follow-up ANOVA Results: Perceptions of Campus Climate and Social Support by Sorority Membership (N=314)

Membership	Sorority		Non-Sorority			
	M	*SD*	*M*	*SD*	*F (df)*	*p*
University Environment	38.61	11.69	38.46	12.52	.01 (1, 313)	.912
Institutional Support	3.81	.93	3.64	.92	2.50 (1, 313)	.115
Faculty Support	3.87	.87	3.70	1.04	2.51 (1, 313)	.114
Latino Peer Support	2.30	1.01	3.49	1.35	78.73 (1, 313)	.001*
General Peer Support	2.38	.78	2.61	1.03	5.01 (1, 313)	.026*
Family Support	2.66	1.28	2.40	.90	3.79 (1, 313)	.052

Regression Summaries: Sorority Member Group

The second hypothesis stated that there is no relationship between perceptions of campus climate, perceptions of social support, and adjustment to college for Latina students who are members of a Latina sorority after controlling for institutional type, institutional size, and generational status in the United States. Using a series of blocked hierarchical multiple regression analyses, the nine independent variables were regressed individually onto the five dependent variables in order to determine their individual contribution to adjustment for the sorority group. A total of three blocks were entered into each regression equation in the following order: (a) control variables, (b) university environment variable, and (c) social support variables.

Prior to conducting each multiple regression analysis, intercorrelation matrices were created to include the three control variables, six independent variables, and one dependent variable per matrix (Appendices N, O, P, Q, and R). Variables with a correlation of $r = .60$ or higher were tested for multicollinearity (K. Inkelas, personal communication, February 3, 2005). The VIF statistics were used to test for multicollinearity (Groß, 2003). As stated by Groβ, a VIF statistic of 10 or higher indicates a high level of multicollinearity between variables. All five intercorrelation matrices indicated a high correlation ($r = .60$ or higher) between perceptions of institutional support, faculty support, and perceptions of the university environment; however, the VIF statistics (2.34-2.56) did not indicate the presence of multicollinearity between these variables. High correlation may have been present between these three variables since the University Environment Scale, which was used to measure

perceptions of campus climate, also addresses students' perception of institutional and faculty support.

Academic adjustment. The regression equation indicated that for the sorority member group, the control variables did not significantly predict any variance in academic adjustment. The addition of the second block revealed that approximately 28% of the variance in academic adjustment was explained by perceptions of the university environment, $R^2 = .28$, adj. $R^2 = .26$, R^2 change $= .28$, $p < .001$. The addition of the third block of social support variables showed that overall social support did not contribute a significant amount of variance in academic adjustment above and beyond the control variables and perceptions of the university environment. The overall regression equation, however, explained 32% of the variance in academic adjustment ($p < .001$) with the variables of perceptions of the university environment ($p < .001$) and general peer support ($p < .05$) contributing significantly to the variance in academic adjustment. Table 4.4 summarizes these results.

Social adjustment. The first block of the control variables entered into the equation did not explain a significant amount of the variance in social adjustment for the sorority member group. Entering the second block, consisting of perceptions of the university environment, significantly added 19% to the variance in social adjustment, $R^2 = .19$, adj. $R^2 = .18$, R^2 change $= .19$, $p < .001$. The addition of the third block of social support variables added 29% ($p < .001$) to the variance in social adjustment for the sorority group. The entire regression equation explained 48% of the variance in social adjustment for the sorority member group ($p < .001$). Variables that contributed

Table 4.4

Summary of Regression Equation for Sorority, Academic Adjustment (N=183)

	β	R²	Adj. R²	R² Change	F (*df*)
Regression Block 1		.00	-.01	.00	.23 (1, 182)
1. Institution Type	.05				
Institution Size	.04				
Citizenship	.05				
Regression Blocks 1 and 2		.28***	.26	.28***	17.20 (1, 182)
1. Institution Type	.11				
Institution Size	.14				
Citizenship	.05				
2. University Environment	-.53***				
Regression Blocks 1, 2, and 3		.32***	.29	.04	9.10 (1, 182)
1. Institution Type	.10				
Institution Size	.12				
Citizenship	.06				
2. University Environment	-.46***				
3. Institutional Support	.18				
Faculty Support	-.14				
Latino Peer Support	.15				
General Peer Support	-.17*				
Family Support	-.07				

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

significantly to the variance in social adjustment were faculty support ($p < .05$), Latino peer support ($p < .01$), and general peer support ($p < 001$). When combined with social support in the third block, perceptions of campus climate did not significantly contribute to the variance in social adjustment. The results are reflected in Table 4.5.

Personal emotional adjustment. The third regression analysis revealed that the first block of control variables did not account for a significant amount of the variance in personal emotional adjustment for the sorority member group. The addition of the second block, perceptions of the university environment, explained 15% of the variance in personal emotional adjustment, $R^2 = .16$, adj. $R^2 = .14$, R^2 change = .15, $p < .001$. The third block, perceptions of social support, explained an additional 5% of the variance in personal emotional adjustment ($p < .05$). In total, 21% of the total variance in personal emotional adjustment was explained by the regression equation ($p < .001$). Perceptions of the university environment ($p < .05$) and perceptions of family support ($p < .01$) contributed significantly to the variance in personal emotional adjustment of sorority members. Details of the regression analysis are found in Table 4.6.

Goal commitment-institutional adjustment. Overall, approximately 48% of the variance in goal commitment-institutional adjustment for the sorority group was explained by the regression equation ($p < .001$). Block one, which included the control variables, was not a significant indicator of variance. In the second block, perceptions of the university environment contributed approximately 27% of the variance in goal commitment-institutional adjustment, $R^2 = .27$, adj. $R^2 = .25$, R^2 change = .27, $p < .001$. The addition of social support variables in the third block contributed approximately 21% of the variance ($p < .001$). Although institutional type did not significantly explain the

Table 4.5

Summary of Regression Equation for Sorority, Social Adjustment (N=183)

	β	R²	Adj. R²	R² Change	F (*df*)
Regression Block 1		.00	-.01	.00	.19 (1, 182)
1. Institution Type	-.06				
Institution Size	-.03				
Citizenship	-.03				
Regression Blocks 1 and 2		.19***	.18	.19***	10.62 (1, 182)
1. Institution Type	-.01				
Institution Size	.05				
Citizenship	-.03				
2. University Environment	-.44***				
Regression Blocks 1, 2, and 3		.48***	.45	.29***	17.61 (1, 182)
1. Institution Type	.06				
Institution Size	-.04				
Citizenship	-.05				
2. University Environment	-.08				
3. Institutional Support	.09				
Faculty Support	-.22*				
Latino Peer Support	-.19**				
General Peer Support	-.48***				
Family Support	.09				

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

Table 4.6

Summary of Regression Equation for Sorority, Personal Emotional Adjustment (N=183)

	β	R^2	Adj. R^2	R^2 Change	F (*df*)
Regression Block 1		.01	-.01	.00	.34 (1, 182)
1. Institution Type	.08				
Institution Size	.06				
Citizenship	.02				
Regression Blocks 1 and 2		.16***	.14	.15***	8.22 (1, 182)
1. Institution Type	.13				
Institution Size	.14				
Citizenship	-.02				
2. University Environment	-.40***				
Regression Blocks 1, 2, and 3		.21***	.17	.05*	5.09 (1, 182)
1. Institution Type	.10				
Institution Size	.08				
Citizenship	.04				
2. University Environment	-.25*				
3. Institutional Support	.02				
Faculty Support	-.06				
Latino Peer Support	-.00				
General Peer Support	-.13				
Family Support	-.19**				

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

variance in goal commitment-institutional adjustment in the first block, when combined

with perceptions of the university environment and perceptions of social support in the

third block, institution type explained a significant amount of variance (p < .05).

Perceptions of the university environment (p < .05), Latino peer support (p < .01), and

general peer support (p < .001) also significantly explained the variance in goal

commitment-institutional adjustment. Details can be found in Table 4.7.

Overall adjustment. For the sorority group, approximately 41% of the total

variance in overall adjustment was explained by the final regression equation (p < .001).

Block one including the control variables did not explain a significant amount of the

variance in overall adjustment. The addition of perceptions of the university environment

in the second block explained approximately 30% of the variance, $R^2 = .30$, adj. $R^2 = .28$,

R^2change = .30, $p < .001$ with a significant contribution from institutional size (p < .05)

and perceptions of the university environment (p < .001). Social support variables entered

in the third block contributed an additional 11% of the variance in overall adjustment ($p <$

.001). Although institutional size combined with perceptions of the university

environment explained a significant amount of the variance in the second block, when the

social support variables were added in the third block, institution size did not

significantly contribute to the variance in overall adjustment. Instead, perceptions of the

university environment ($p < .001$) and general peer support ($p < .001$) were major

contributors to the variance. Table 4.8 highlights the results of this regression equation.

<div align="center">Regression Summaries: Non-Sorority Member Group</div>

The third hypothesis stated that there is no relationship between perceptions of campus

climate, perceptions of social support, and adjustment to college for Latina college

Table 4.7

Summary of Regression Equation for Sorority, Goal Commitment-Institutional Adjustment (N=183)

	β	R^2	Adj. R^2	R^2 Change	F (*df*)
Regression Block 1		.00	-.02	.00	.05 (1, 182)
1. Institution Type	.03				
Institution Size	.02				
Citizenship	-.01				
Regression Blocks 1 and 2		.27***	.25	.27***	16.29 (1, 182)
1. Institution Type	.09				
Institution Size	.12				
Citizenship	-.00				
2. University Environment	-.52***				
Regression Blocks 1, 2, and 3		.48***	.45	.21***	17.82 (1, 182)
1. Institution Type	.13*				
Institution Size	.02				
Citizenship	-.01				
2. University Environment	-.19*				
3. Institutional Support	.03				
Faculty Support	-.14				
Latino Peer Support	-.17**				
General Peer Support	-.43***				
Family Support	-.01				

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

Table 4.8

Summary of Regression Equation for Sorority, Overall Adjustment (N=183)

	β	R²	Adj. R²	R² Change	F (df)
Regression Block 1		.00	-.02	.00	.12 (1, 182)
1. Institution Type	.04				
Institution Size	.04				
Citizenship	.02				
Regression Blocks 1 and 2		.30***	.28	.30***	18.93 (1, 182)
1. Institution Type	.10				
Institution Size	.15*				
Citizenship	.03				
2. University Environment	-.55***				
Regression Blocks 1, 2, and 3		.41***	.38	.11*	13.19 (1, 182)
1. Institution Type	.11				
Institution Size	.08				
Citizenship	.03				
2. University Environment	-.33***				
3. Institutional Support	.11				
Faculty Support	-.15				
Latino Peer Support	-.06				
General Peer Support	-.30***				
Family Support	-.07				

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

students who are non-members of a Latina sorority after controlling for institutional type, institutional size, and generational status in the United States. Similar to the analysis performed for the second hypothesis, a series of blocked hierarchical multiple regression equations were conducted for the third hypothesis. The nine independent variables were regressed onto the five dependent variables in order to determine the contribution of each block and three control variables, perceptions of the university environment, and the five social support variables on each adjustment subscale and overall adjustment for the non-sorority group. A total of three blocks were entered into each regression equation in the same order as the sorority member group. Five intercorrelation matrices were created in order to test for multicollinearity between the variables (Appendices S, T, U, V, and W). There were several highly correlated items in all four subscales and the full scale. To begin, institutional size and institutional type indicated high correlations ($r > .60$). After checking the VIF statistics (1.76-1.82) it was determined that multicollinearity was not a threat to the analysis. Perceptions of the campus climate were also highly correlated ($r > .60$) with perceptions of faculty support in all subscales and full scale; however, VIF statistics (1.03-3.19) did not indicate that multicollinearity was present.

Academic adjustment. The first multiple regression equation for the non-sorority group indicated that approximately 34% of the total variance in academic adjustment was explained by the regression equation ($p < .001$). The first block, consisting of the three control variables, was not significantly associated with academic adjustment. The addition of the second block, perceptions of the university environment, accounted for approximately 27% of the variance in academic adjustment for the non-sorority member group, $R^2 = .27$, adj. $R^2 = .25$, R^2 change $= .27$, $p < .001$. The addition of the social

support variables in the third block revealed that social support accounted for 7% of the variance in academic adjustment for the non-sorority group ($p < .05$). For the entire regression equation, perceptions of the university environment (p < .001), institutional support (p < 05), and family support (p < .01) were significant predictors of the variance in academic adjustment. A summary of results for this regression analysis is found in Table 4.9.

Social adjustment. The entire regression analysis explained approximately 64% of the total variance in social adjustment for the non-sorority group. The first block of control variables was not significant in relation to social adjustment. The addition of the second block, perceptions of the university environment, explained 34% of the variance in social adjustment, $R^2 = .38$, adj. $R^2 = .36$, R^2 change $= .34$, $p < .001$. When entered in the third block, variables measuring perceptions of social support explained an additional 26% of the variance in social adjustment ($p < .001$). The control variables in block one were not significant contributors to the variance in social adjustment for non-sorority member group but when combined with other independent variables in the third block, institutional type ($p < .05$) and institutional size ($p < .01$), along with perceptions of the university environment ($p < .001$), institutional support ($p < .001$), and general peer support ($p < .001$) were significant predictors of social adjustment. Table 4.10 summarizes the results of this analysis.

Personal emotional adjustment. For the non-sorority group, a regression analysis revealed that approximately 30% of the total variance in personal emotional adjustment was explained by a combination of all the variables entered into the regression equation; perceptions of the university environment ($p < .01$) and family support ($p < .001$)

Table 4.9

Summary of Regression Equation for Non-Sorority, Academic Adjustment (N=131)

	β	R²	Adj. R²	R² Change	F (*df*)
Regression Block 1		.01	-.02	.01	.38 (1, 130)
1. Institution Type	-.03				
Institution Size	-.08				
Citizenship	-.07				
Regression Blocks 1 and 2		.27***	.25	.27***	11.88 (1, 130)
1. Institution Type	-.01				
Institution Size	-.04				
Citizenship	.02				
2. University Environment	-.52***				
Regression Blocks 1,2, and 3		.34***	.30	.07*	7.04 (1, 130)
1. Institution Type	-.02				
Institution Size	-.01				
Citizenship	.03				
2. University Environment	-.50***				
3. Institutional Support	.27*				
Faculty Support	-.14				
Latino Peer Support	-.13				
General Peer Support	-.08				
Family Support	-.21**				

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

Table 4.10

Summary of Regression Equation for Non-Sorority, Social Adjustment (N=131)

	β	R^2	Adj. R^2	R^2 Change	F (*df*)
Regression Block 1		.03	.01	.03	1.49 (1, 130)
1. Institution Type	.17				
Institution Size	.14				
Citizenship	-.14				
Regression Blocks 1 and 2		.38***	.36	.34***	18.98 (1 130)
1. Institution Type	.20*				
Institution Size	.20*				
Citizenship	-.04				
2. University Environment	-.60***				
Regression Blocks 1, 2 and 3		.64***	.61	.26***	23.59 (1, 130)
1. Institution Type	.18*				
Institution Size	.22**				
Citizenship	.01				
2. University Environment	-.35***				
3. Institutional Support	.30***				
Faculty Support	-.09				
Latino Peer Support	.02				
General Peer Support	-.61***				
Family Support	-.08				

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

each contributed significantly to the variance in personal emotional adjustment. Individually the control variables entered in block one did not significantly predict personal-emotional adjustment. Perceptions of the university environment entered in the second block explained 20% of the variance in personal emotional adjustment, $R^2 = .21$, adj. $R^2 = .19$, R^2 change = .20, $p < .001$, while the third block revealed that social support explained an additional 9% of the variance ($p < .01$). Table 4.11 summarizes the results of this regression analysis.

Goal commitment-institutional adjustment. The first block entered into the regression analysis included the control variables and was not significantly related to goal commitment-institutional adjustment. The second block, perceptions of the university environment, added approximately 35% to the variance in goal commitment-institutional adjustment, $R^2 = .37$, adj. $R^2 = .35$, R^2 change = .35, $p < .001$. The third block of social support variables made a significant contribution to the variance, explaining approximately 19% ($p < .01$). In total, 56% on the variance in goal commitment-institution adjustment was explained by the regression equation. Institutional type and size, alone, did not significantly explain variance in goal commitment-institutional adjustment but together with the other independent variables, perceptions of the university environment ($p < .001$), general peer support ($p < .001$), institutional type ($p < .05$), and institutional size ($p < .05$) were significant predictors of the variance in goal commitment-institutional adjustment. Table 4.12 reveals the details of this analysis.

Overall adjustment. For the non-sorority group, approximately 51% of the variance in overall adjustment was explained by the final regression equation. The first

Table 4.11

Summary of Regression Equation for Non-Sorority, Personal Emotional Adjustment (N=131)

	β	R²	Adj. R²	R² Change	F (*df*)
Regression Block 1		.01	-.01	.01	.40 (1, 130)
1. Institution Type	-.10				
Institution Size	-.08				
Citizenship	-.06				
Regression Blocks 1 and 2		.21***	.19	.20***	8.47 (1, 130)
1. Institution Type	-.07				
Institution Size	-.04				
Citizenship	.02				
2. University Environment	-.46***				
Regression Blocks 1, 2, and 3		.30***	.25	.09**	5.73 (1, 130)
1. Institution Type	-.06				
Institution Size	-.04				
Citizenship	.05				
2. University Environment	-.31**				
3. Institutional Support	.14				
Faculty Support	-.13				
Latino Peer Support	.03				
General Peer Support	-.09				
Family Support	-.28***				

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

Table 4.12

Summary of Regression Equation for Non-Sorority, Goal Commitment-Institutional Adjustment (N=131)

	β	R^2	Adj. R^2	R^2 Change	F (*df*)
Regression Block 1		.02	-.00	.02	.93 (1, 130)
1. Institution Type	.16				
Institution Size	.12				
Citizenship	-.09				
Regression Blocks 1 and 2		.37***	.35	.35***	18.47 (1, 130)
1. Institution Type	.19*				
Institution Size	.17				
Citizenship	.01				
2. University Environment	-.60***				
Regression Blocks 1, 2, and 3		.56***	.52	.19***	16.78 (1, 130)
1. Institution Type	.18*				
Institution Size	.17*				
Citizenship	.04				
2. University Environment	-.36***				
3. Institutional Support	.11				
Faculty Support	.02				
Latino Peer Support	.07				
General Peer Support	-.52***				
Family Support	-.10				

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

block alone, including control variables, did not contribute significantly to the variance. Perceptions of the university environment added in the second block accounted for approximately 37% of the variance, $R^2 = .38$, adj. $R^2 = .36$, R^2 change $= .37$, $p < .001$. In the third block, variables measuring perceptions of social support explained 13% of the variance in overall adjustment ($p < .0001$). Overall, institution type ($p < .05$), institution size ($p < .05$), perceptions of the university environment ($p < .001$), institutional support ($p < .01$), general peer support ($p < .001$), and family support ($p < .001$) all made a significant contributions to the variance in overall support for the non-sorority group. Table 4.13 explains the results of the fifth regression analysis conducted on the non-sorority group.

Summary

This chapter has provided details of the statistical procedures conducted in order to test the three hypotheses. Results of a MANOVA indicated that there was a significant difference in adjustment levels for Latina students who are members of a Latina sorority in comparison to Latina students who are not members. A further examination revealed that sorority members significantly differed from non-sorority members on social adjustment and goal-commitment-institutional adjustment with the sorority member group scoring higher on both subscales. For academic adjustment, personal-emotional adjustment, or overall adjustment, there were no significant differences by membership.

Review of the intercorrelation matrices for the independent and dependent variables implied that there were some high correlations between the University Environment Scale and the social support scales, particularly with institutional support and faculty support. Additionally, for the non-sorority group, institutional size and

Table 4.13

Summary of Regression Equation for Non-Sorority, Overall Adjustment (N=131)

	β	R²	Adj. R²	R² Change	F (*df*)
Regression Block 1		.01	-.01	.01	.46 (1, 130)
1. Institution Type	.02				
Institution Size	-.00				
Citizenship	-.10				
Regression Blocks 1 and 2		.38***	.36	.37***	19.37 (1, 130)
1. Institution Type	.06				
Institution Size	.04				
Citizenship	.00				
2. University Environment	-.62***				
Regression Blocks 1, 2 and 3		.51***	.47	.13***	13.81 (1, 130)
1. Institution Type	.04*				
Institution Size	.07*				
Citizenship	.03				
2. University Environment	-.47***				
3. Institutional Support	.27**				
Faculty Support	-.12				
Latino Peer Support	.07				
General Peer Support	-.31***				
Family Support	-.21***				

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

institutional type were also highly correlated.

Specific findings of the regression analyses will be further interpreted and discussed in the next chapter. Additionally, the significance of these findings will be highlighted along with a discussion of limitations of the study. In conclusion, implications for practice in student affairs and suggestions for future research will be noted.

CHAPTER FIVE

DISCUSSION

The present study was two-fold in its attempt to explore the experiences of Latina undergraduate students in college. First, the focus was to determine if there is a difference in adjustment levels for Latina students involved in a Latina sorority and those who are not involved. Based on exploratory literature available (Layzer, 2000; Olivas, 1996; Patterson, 1998), it was hypothesized that members of a Latina sorority would have different perceptions of the campus climate and different perceptions of social support; therefore, they were expected to reflect different levels of adjustment than women who are not members of a Latina sorority. The second part of this study was focused on examining the specific relationship of perceptions of campus climate, social support, and adjustment to college for Latina students who are members of a Latina sorority and those who are non-members. The previous chapter discussed the findings related to the three hypotheses explored while this chapter will interpret these findings and their significance, review limitations of the study, discuss implications for professional practice, and provide recommendations for future research.

Interpretation of Findings for Preliminary Analyses

Adjustment to College for Latina Sorority and Non-Sorority Members

The MANOVA used to compare adjustment levels for Latina sorority and non-sorority members was found to be significant. Univariate ANOVAs revealed that members had significantly higher social adjustment and goal commitment-institutional adjustment than non-members. The social adjustment subscale of the SACQ measures a student's success in coping with the interpersonal and social demands linked to the

college experience (Baker & Siryk, 1999). Specifically, the social subscale measures the extent and success of social activities and functioning, involvement and relationships with other people on campus, ability to cope with social relocation, and satisfaction with the social environment (Baker & Siryk). Baker and Siryk posited that lower scores indicate less participation in social activities, increased difficulty separating from home, greater sense of loneliness, and lower self-confidence. Overall, Latina sorority members in the sample had a higher mean adjustment score than non-sorority members, indicating that involvement in a Latina sorority is associated with higher levels of social adjustment to college. This finding parallels Patterson's (1998) argument that membership in a Latina sorority fosters social integration on campus. The sorority member sample was drawn from a social sorority; therefore, one might argue that a social sorority fosters social integration for its members while others might say that women who join a social sorority are adjusted socially when they join. Either way, the standardized social adjustment mean score for the Latina sorority group places them in the 58th percentile while the standardized social adjustment mean score of the non-sorority group denotes the 38th percentile (Baker & Siryk). When compared to the general population of college students, the sorority member group still appears to be more adjusted than the non-sorority member group but may be less socially adjusted than other students in college, depending on the norm of the group.

The goal commitment-institutional adjustment subscale of the SACQ was designed to measure a student's relationship, attachment, and commitment to the institution's goals (Baker & Siryk, 1999). This includes the degree of satisfaction attached to participation in college in general, as well as the level of satisfaction a student

has with her particular institution (Baker & Siryk). Lower scores in this area typically imply greater likelihood of discontinuance and lower levels of satisfaction (Baker & Siryk). For this study, members of a Latina sorority had higher scores for goal commitment-institutional adjustment than non-members, implying that membership is related to higher levels of satisfaction with the institution and higher levels of commitment to the goals of the institution. This finding is unique in comparison to the existing literature on Latina sorority membership since commitment to the institution was not specifically addressed in previous studies. It does, however, validate previous findings that membership in an ethnic student organization fosters a greater sense of belonging and assists ethnic minority students in becoming acculturated into the campus community (V. V. Cabrera, 1998; Hurtado, 1994; Hurtado & Carter, 1997). The standardized goal commitment-institutional adjustment scores for the sorority member group places them in the 54th percentile when compared to the general population of college students while the non-sorority group is in the 42nd percentile. Depending on the norm of the group, the sorority members appear to be more adjusted when compared to the non-sorority group but the results indicate that they may be less adjusted than the general population of college students in regards to goal commitment-institutional adjustment.

Interpretation of Findings for Regression Analyses

A series of regression analyses revealed the degree of association between institutional type, institutional size, generational status in the United Stated, perceptions of campus climate, perceptions of social support, and five types of adjustment. Since there was a significant difference in adjustment levels for Latina sorority members and

non-members, the groups were analyzed separately in regression analyses for each type of adjustment. The discussions below relate to the commonalities and differences in the results for sorority members and non-sorority members.

Generational Status, Institutional Type, and Institutional Size

Previous studies indicated that institutional type, institutional size, and generational status in the United States may be related to Latino students' ability to adjust to campus (Fiske, 1988; Hurtado et al., 1996; Schlossberg, 1981; Schneider & Ward, 2003); however, this study only partially concurred with this prediction. Overall, the first block consisting of the control variables did not contribute significantly to the variance for any form of adjustment for sorority members and non-members. Institutional type and size, however, emerged as significant predictors in the regression combining all three blocks for non-sorority member social adjustment, non-sorority member goal commitment-institutional adjustment, and non-sorority member overall adjustment. These findings were similar to Hurtado et al.'s (1996) conclusions that college size had a significant effect on social adjustment and goal commitment-institutional adjustment. For the non-sorority member group, a combination of the control variables and independent variables predicted 64% of the total variance in social adjustment, 56% of the total variance in goal commitment-institutional adjustment, and 51% of the total variance in overall adjustment. For the sorority member group, institutional size emerged as a significant predictor in the final regression for sorority member goal commitment-institutional adjustment with 48% of the total variance explained by a combination of the control variables and independent variables. Institutional size also surfaced as a significant predictor in the second block for sorority member overall adjustment with

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30% of the variance explained although institutional size did not appear in the third block for the sorority member overall adjustment.

These results indicate that generational status in the United States was not found to be a significant predictor to any type of adjustment in college while institutional type and institutional size were found to be related in some instances when combined with perceptions of campus climate or social support. These findings parallel Hurtado et al.'s (1996) conclusions that background characteristics of Latino students were not related to overall adjustment while institutional characteristics were. Generational status in the United States may not be significant to Latina students' adjustment for several reasons. For example, it has been argued that Latino college students are very resilient, despite adversity and challenges. As suggested by a number of researchers (V. V. Cabrera, 1998; Rendon, 2003; Throgmorton, 1999), Latino college students are often intrinsically motivated and will overcome obstacles in order to succeed in college. Challenges posed by generational status in the United States may be one factor that Latino students are able to successfully overcome; therefore, it is one background characteristic that does not significantly predict adjustment levels. It is important to note that generational status in the United States was the only background factor considered in the regressions analyses whereas ethnicity and college generational status were excluded. Other factors suggested to affect Latino students' adjustment but were excluded in this study include preparedness for college, percentage of Latinos in high school, and English as a first language (Hurtado, et al.).

These results also indicate that institutional type and size may be significant predictors of adjustment when combined with other variables. A careful examination of

the institutional characteristics of both groups reveals that 42% of the non-sorority members attended a private institution in comparison to 21% of the sorority member group. Additionally, a larger percentage of the non-sorority member group attended a small (22%) or medium (31%) size institution compared to the sorority member group who attended a small (16%) or medium (16%) size institution. The fact that institutional type and size were more often significant predicators for the non-sorority member group's adjustment than the sorority member group's adjustment may be a result of the difference in institutional characteristics. Hurtado (1994) posited that racial/ethnic tensions are more likely to be reported by Latino students at larger institutions and Latino students at more selective institutions.

Campus Climate, Social Support, and Adjustment to College for Both Groups

Although some group differences were found in the relationships between perceptions of campus climate, social support, and adjustment to college, similarities between the sorority and non-sorority groups were also discovered.

Academic adjustment. For Latina sorority members, perceptions of the campus climate was a significantly negative predictor of academic adjustment. The University Environment Scale was designed to measure the expressed concerns of ethnic minority students regarding the university climate (Gloria & Kurpius, 1996). Specifically, the scale addresses perceptions of class size, faculty availability, comfort with the university setting, and staff support on campus (Gloria & Kurpius). The academic adjustment subscale, according to Baker and Siryk (1999), measures attitudes towards academic goals, motivation for academic pursuits, academic success and performance, and satisfaction with the academic environment. In this study, higher scores on the University

Environment Scale indicated a negative perception of the environment while higher scores on the SACQ implied higher adjustment levels. A negative perception of the campus climate, therefore, was related to lower levels of adjustment for Latina sorority members. Similarly, perceptions of the campus climate was a negative predictor of academic adjustment for the non-sorority members. Since the academic adjustment scale measures educational purpose, academic motivation, and efficacy of academic success (Baker & Siryk), these findings suggest that if Latina students in both groups sense a negative perception of the campus climate, it may deter them from their sense of educational purpose, academic motivation, and efficacy in fulfilling their academic goals.

For the non-sorority group, an intercorrelation matrix revealed that perceptions of campus climate were highly correlated with faculty support. This may indicate that, for the non-sorority group, interaction with faculty may be a large predictor of their perceptions of the climate or perceptions of the campus climate could predict their level of interaction with faculty. Faculty support was defined by the respondents' sense that there is an adequate amount of Latino professors on campus, that professors have a positive image of Latino students, that professors are willing and able to help when needed, and that professors discuss issues relevant to Latino students in class. As suggested by A. F. Cabrera and Nora (1994), in-class discrimination was a major predictor of feelings of alienation for ethnic minority students. A sense of isolation in the classroom may affect Latina non-sorority members' ability to adjust to the academic environment or vice versa in that their ability to adjust to the academic environment may be related to their isolation. There was not a significant correlation between faculty support and perceptions of campus climate for the sorority group, which may signify that

sorority membership acts as a buffer when it comes to coping with in-class isolation and discrimination. Overall, there was no significant difference in academic adjustment based on membership status; therefore, Latina sorority membership may not mitigate academic demands and pressures of college beyond in-class interactions.

The results of a multiple regression analysis also indicated that for the sorority member group, general peer support was a negative predictor of academic adjustment. In the current study, a low score on the general peer support scale implied a high sense of support. A high sense of general peer support, therefore, was related to a high level of academic adjustment. Thus, findings of this study indicate that support from general peers may predict higher levels of academic adjustment for Latina sorority members. General peer support was measured by comfort with other students on campus, willingness of other students to help the respondent with personal issues, and the respondent's ability to make friends with other students on campus. Although the participants were not asked to provide information about the percentage of ethnic minority students on campus, Latino students are still underrepresented on most college campuses (Schmidt, 2003a). It is assumed, therefore, that the respondents of this study are still underrepresented in the academic setting. For this reason, these results suggest that Latina sorority members are more effective at managing the academic setting through interaction with non-Latino peers than the non-members. Effectively managing relationships with general peers is a predictor of academic adjustment for the Latina sorority members.

For the non-sorority group, institutional support was a positive predictor of academic adjustment. In this study, lower scores on the social support scales indicated a

higher sense of support; therefore, a higher level of perceived support was related to lower levels of adjustment. These findings suggest that academic adjustment may be lower for non-sorority members if they sense a high level of support from the institution. Institutional support was measured by variables such as the availability of a counseling center, adequate library materials for Latino studies courses, and comfort in visiting the doctors and health care practitioners in the health center. The results suggest that these variables may not be indicators of academic motivation, performance, and success for Latina students, even when they know they are available on campus. According to Schneider and Ward (2003) faculty support was the only form of support that significantly predicted academic adjustment for Latino students. In this study, however, faculty support was not significantly related to any type of adjustment.

For the non-sorority group, family support was also a significant predictor of academic adjustment. The negative relationship indicates that a higher level of perceived family support was related to higher levels of academic adjustment. Family support was measured by the level in which respondents sensed that their family understood the college environment, supported their decision to attend college, provided advice during stressful times in college, and expressed interest in the respondents' college life. According to Orozco (2003), family support, in general, is important to Latina students, even if the support is not directly related to academics. In comparison to the sorority member group, non-member Latina students may rely on their families for support if they cannot find support on campus. As posited by Layzer (2000) women often join Latina sororities in search of sisterhood and support. Members, therefore, may not rely on their

families for academic support if they have found an adequate amount of support through the sisterhood.

Social adjustment. Perceptions of the campus climate for both the sorority and non-sorority group was a negative predictor of social adjustment. In this study, a high score on the University Environment Scale is equated to a negative perception of the campus climate. Thus, more negative perceptions of the campus climate for the non-sorority group was related to a low adjustment score. Perceptions of campus hostility towards Latina students, therefore, could ultimately affect their ability to cope with social pressures. Since perceptions of campus climate was a predictor of adjustment for both groups, membership in a Latina sorority may not be sufficient in alleviating stress related to incongruent perceptions of the campus culture.

Perceptions of the campus climate predicted all forms of adjustment for both groups except social adjustment for the sorority group. Faculty support, Latino peer, and general peer support, however, were significant predictors of social adjustment for the sorority group. For the sorority group, higher levels of faculty support, Latino peer support, and general peer support were related to higher levels of social adjustment. Membership, alone, may not be sufficient in assisting Latina students in their social adjustment but when combined with support from faculty, Latino peers, and other peers on campus, Latina students may reflect higher levels of social adjustment. Schneider and Ward (2003) also concluded that faculty support and general peer support were related to social adjustment. Latino peer support, however, was not significantly associated with social adjustment for Latino students at the State University of New York at Geneseo (Schneider & Ward).

For the non-sorority group, institutional type and institutional size were not significant predictors of social adjustment in the first block but when combined with perceptions of the campus climate, type and size were positive predictors of social adjustment. Perceptions of the campus climate, therefore, may be related to type and size for the non-sorority group, similar to results found by Hurtado (1994) in studying high-achieving Latino students at highly-selective institutions and small institutions located in rural areas.

For the non-sorority group, general peer support negatively predicted social adjustment. Based on the scale direction in this study, a high level of general peer support is correlated with a higher level of social adjustment for the non-sorority group. This suggests that non-sorority Latina students who sense a higher level of comfort from their general peers will report higher levels of adjustment to the social environment and social relationships on campus. Unlike the sorority group, faculty support and Latino peer support were not significant predictors of social adjustment on campus for non-sorority members. This indicates that in order for non-sorority members to become socially adjusted, general peer support is important. It could also imply that a high level of social adjustment may lead to a high level of general peer support. The difference from the sorority member group may also imply that sorority members receive support from Latino peers as a result of their membership in an organization that serves Latina students.

Institutional support was a positive predictor of social adjustment for the non-sorority group. In this study, a high level of perceived support implies a relationship with low levels of adjustment; therefore, if non-sorority Latina students sense a high level of

support from the institution, they may have a difficult time socially adjusting to college. It may be argued that although Latina students sense a strong level of support from their institution, it does not mean that the support adequately addresses their social needs. As argued by Torres (2004), although the term "Latino" is intended to be inclusive of a broad range of people with similar cultures, history, and background, it unintentionally categorizes people into a homogenous group. Similarly, universities may use the term "Latino" to be inclusive of a large population of students without realizing that they may be alienating students that do not identify with the mainstream definition of "Latino." In doing so, Latina students may have a difficult time adjusting to the social environment in college because the environment is not congruent with their individual needs as Latinas. This, however, was not the case with Latina sorority members. This is not surprising since MANOVA results showed that Latina sorority members were found to have higher levels of goal commitment-institutional adjustment than non-sorority members. This may be a sign that universities are catering to those Latino students that are more visible on campus (i.e., sorority members) while alienating those that are not as involved. Additionally, a high level of goal commitment-institutional adjustment for Latina sorority members denotes a high sense of satisfaction with the institution as well as a strong relationship with and connection to the university.

Personal emotional adjustment. The personal emotional adjustment scale addresses a student's psychological and physical well-being (Baker & Siryk, 1999). For both groups, similarities existed along personal emotional adjustment levels. For the sorority and non-sorority group, campus climate was a negative predictor of personal-emotional adjustment demonstrating that Latina students who perceive a higher level of

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incongruence between their personal beliefs and the values of the campus environment have lower personal emotional adjustment scores. Lower scores are often associated with greater emotional reliance on another person, fewer psychological coping resources, and lower levels of psychological well-being (Baker & Siryk). Hurtado et al. (1996) also concluded that Latino students' perceptions of the campus climate was related to their personal emotional adjustment and may ultimately be connected to their sense of belonging on campus.

For both groups, family support was also a negative predictor of personal emotional adjustment. High scores on the social support scale indicate a lower level of perceived support; therefore, if a Latina student perceives a low level of familial support, she may have lower personal emotional scores. Latino culture is typically considered a collectivistic culture in which the welfare of the group, conformity, and interdependence are emphasized (Pope et al., 2004). For this reason, family members may rely on each other for spiritual and psychological support; therefore, without familial support, Latina students may have more difficulty maintaining a psychological well-being while in college. Rodriguez et al. (2003) proposed that family support and friend support was equally important in determining psychological well-being of Latino students. These findings were similar to those of Schneider and Ward (2003) in which family support was the only significant predictor of personal emotional adjustment.

Since there was not a significant difference between the groups along personal emotional adjustment levels, sorority membership may not provide enough support for Latina college students in regards to their psychological well-being. The standardized scores of the SACQ placed both groups into the 50$^{\text{th}}$ percentile when compared to the

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general student population. This indicates there 50% of the population is more adjusted than both groups when it comes to personal emotional adjustment. Although this seems like a low level of adjustment, another perspective may be that personal emotional stress is difficult to mitigate in college, despite various forms of support. Solberg et al. (1994) concluded that social support may not significantly alleviate college related stress since psychological stress is often high for college students, making it difficult for one form of intervention to reduce it.

Goal commitment-institutional adjustment. As stated previously, there were significant differences between the sorority and non-sorority group members for goal commitment-institutional adjustment; however, there were also some similarities when examining individual predictors of adjustment. Perceptions of campus climate negatively predicted goal commitment-institutional adjustment for both groups. Additionally, general peer support negatively predicted goal commitment-institutional adjustment for both groups. In this study, low scores on the University Environment Scale and on the social support scales indicate a more positive perception of the campus climate and higher levels of perceived support. A positive perception of the campus climate, therefore, is related to a high level of goal commitment-institutional adjustment for both groups. Additionally, a stronger sense of support from general peers is related to higher levels of goal commitment-institutional adjustment for both groups.

Latino peer support, however, was a negative predictor of goal commitment-institutional adjustment for the sorority group only. Again, a low score implies a high level of perceived Latino support; therefore, a high level of Latino peer support may be related to a high level of goal commitment-institutional adjustment. Latino peer support

was defined by participation in Latino student organizations, comfort and fit with other Latino students, and the degree of Latino student friendships. Since the groups differed along this predictor variable, it is suggested that membership in a Latina sorority fosters higher support from Latino peers as well as a greater attachment to the institution.

Although institutional type did not significantly predict the level of goal commitment-institutional adjustment for either group in the first block, when combined with social support variables and the University Environment variables, institutional type was a significant predictor of goal commitment-institutional adjustment. This indicates that there may be a relationship between perceptions of campus climate, social support, and institutional type in regards to predicting goal commitment-institutional adjustment for both groups. In this study, the positive beta sign suggests that, for both groups, attending a private institution is associated with higher goal commitment-institutional adjustment. This may be the result of more services and support offered at a private institution. Additionally, those who attend a private institution may have a positive affinity for the institution upon entrance, making them more committed to the institution.

For the non-sorority group, institutional size was also a positive predictor of goal commitment-institutional adjustment when combined with perceptions of campus climate and social support. For this group, stronger goal commitment-institutional adjustment may be correlated with attending a larger institution. This finding may suggest that a large institution has more to offer in regards to services and programs. Additionally, it may imply that Latina students who have a stronger goal commitment-institutional adjustment are more likely to attend larger institutions. In using multiple regression, a relationship is determined but cause and effect is still unknown.

Overall adjustment. For the sorority member group, perceptions of campus climate and general peer support were the two significant negative predictors of overall adjustment. This suggests that, overall, Latina sorority members who have more positive perceptions of the campus environment and perceive higher levels of support from their general peers report higher overall adjustment to college.

For the non-sorority group, perceptions of campus climate, faculty support, family support, and general peer support negatively predicted overall adjustment. Again, this indicates that those Latina non-sorority members who sense a positive perception of the campus climate report higher levels of adjustment overall. Additionally, a higher sense of faculty support, family support, and general peer support is related to higher levels of overall adjustment. Institutional size and type were positive predictors of overall adjustment for the non-sorority group. Overall adjustment, therefore, is related to perceptions of the environment and perceptions of general peer support for both groups; however, the Latina non-sorority member group may also report different overall adjustment levels when combined with other forms of support such as family support and faculty support. These findings are similar to Schneider and Ward (2003) who concluded that a combination of different support mechanisms are related to higher levels of adjustment for Latino students.

Limitations

There are several limitations to this study worth noting. First, a quasi-experimental design is not a true experiment that assigns participants randomly to individual groups, thus presenting several threats to internal validity. Additionally, the sampling technique was not random and may have caused a difference in responses

simply based on group differences (McMillan & Schumacher, 2001). Since neither cluster sampling nor snowball sampling can ensure a random sample will be chosen, it may be more difficult to generalize the present findings to all Latina college students. Self selection was also a limitation since a percentage of the population was not represented in this study; mainly, those that did not chose to complete the study. Additionally, those that chose to participate may be more adjusted and therefore willing to participate in a study about their experiences as Latina students. The original sorority member sample had a 28.7% response rate from respondents who volunteered to participate while 71.3% did not respond. Due to the nature of the snowball sampling technique, the response rate is unknown for the comparison group, which is also a limitation.

The participants in the study were likely to be involved on campus since a majority of the respondents were members of a Latina sorority. Additionally, those Latina students who received the survey through snowball sampling were students that are somehow connected to the sorority members sampled or the campus administrators who sent them the email or referred them to the researcher. Based on these arguments, it is assumed that the sample was highly skewed towards traditional students between the ages of 18-24 and inclusive of students who are connected to student affairs or academic units on campus. The sample, therefore, may be lacking representation from Latina students who are non-traditional, married, single mothers, or without certain kinds of connections to the university. Although the respondents from the comparison group were not members of a Latina sorority, they may have been members of another organization on campus with similar characteristics, thus affecting the results. Experimenter effects may

have also caused the sorority member group to attempt to answer more favorably since the researcher is a member of the sorority.

By using a correlation design, the researcher attempted to demonstrate the relationship between various forms of social support, perceptions of campus climate, and five levels of adjustment to college. Correlation analyses, however, do not imply causal effects; therefore, this research was an attempt to shed light on the possible relationships of the variables as opposed to adequately predicting a directional impact of one variable on the other. Additionally, the study was an attempt to reveal outcomes related to Latina sorority membership by comparing the sorority member group to the non-sorority member group. Using the sampling techniques of cluster sampling and snowball sampling, these predictions may or may not be accurate. The snowball sampling technique employed is traditionally used for qualitative studies as opposed to quantitative (McMillan & Schumacher, 2001), presenting additional limitations to the researcher's ability to generalize findings.

Another limitation of the current study was that it was administered to students in a variety of class levels during the second semester of the academic year. Depending on the time of year and the class level of respondents, students may react to the questions differently. Additionally, respondents were at a variety of institutions with different schedules for midterms and spring break which could have affected the response rate or altered the respondent's perceptions of adjustment and support. Additionally, respondents may reflect different levels of adjustment to campus depending on their year in school. Levels of adjustment could fluctuate between years in college; however, the researcher did not control for this in the analyses.

There are several limitations of this study based on the instruments used. First, the University Environment Scale (UES) and the institutional support and faculty support subscales of the social support inventory were highly correlated. A closer examination of the UES revealed that several of the questions were similar to those found in the social support subscales. For example, the UES has a question that states, "there are tutoring services available for me on campus," and the institutional support subscale states, "there are adequate tutoring centers on campus to meet my academic needs." Since there are several instruments available that measure perceptions of campus climate and social support, the use of another instrument may have eliminated repetition between scales and subscales. Additionally, the general peer support scale of the social support instrument does not clearly distinguish between general peers and Latino peers. For example, the question, "the friendships that I have developed on campus are personally satisfying" is meant to measure general peer support but may be interpreted by the respondent as any relationship. The Latina college students who responded to the survey, therefore, may have interpreted the word "friendships" as those with other Latino students.

There are also limitations regarding the SACQ. First, the SACQ equates greater reliability on another person as a negative characteristic. Latino culture, however, is typically a collective culture (Pope et al., 2004); therefore, Latinos are more prone to rely on each other for emotional support. In this aspect, the SACQ may not be culturally sensitive or accurate in measuring adjustment for Latino students. Additionally, two of the questions on the SACQ instruct participants to skip the question if they do not live on campus, which ultimately skews the mean scores of the subscales since scoring instructions do not require the researcher to fill in the missing values with mean scores.

The collective survey did not include additional demographic questions that may have enhanced the analyses including resident status on or off campus. A final limitation is that the collective survey instrument was lengthy and often discouraged respondents from completing it. Nearly 50% of the surveys that were opened were not completed and therefore not usable, indicating that the response rate may have increased if the survey was shorter.

<div align="center">Implications for Professional Practice</div>

The present study was an attempt to enrich the current literature surrounding the outcomes associated with membership in a Latina sorority. It is particularly significant because it was one of the first attempts to gather quantitative data on a sample of Latina students involved in a Latina sorority. It not only validates the qualitative literature available (Layzer, 2000; Olivas, 1996; Patterson, 1998) but also enriches it. For example, previous studies were exploratory and had not focused on adjustment for sorority membership. This study provides evidence that Latina sorority members report higher levels of social adjustment and goal-commitment institutional adjustment than non-sorority members. This is significant since institutional commitment had not been explored in previous research addressing Latina sorority membership. The findings also suggest that general peer support is important to the academic adjustment of Latina sorority members while Latino peer support is important to the social adjustment and goal commitment-institutional adjustment for sorority members. Contrary to findings reported by Schneider and Ward (2003), Latino peer support appears to be an important indicator of adjustment for Latina sorority members.

Overall, perceptions of campus climate were related to most forms of adjustment for both groups. For the non-sorority group, more negative perceptions of the campus climate was a significant predictor of lower levels of all five adjustment types including academic, social, personal emotional, goal commitment-institutional, and overall adjustment. For the sorority group, more negative perceptions of campus climate was a significant predictor of lower levels of four kinds of adjustment including academic, personal-emotional, goal commitment-institutional, and overall adjustment but not for social adjustment. This is an important consideration for student affairs administrators since researchers (A. F. Cabrera & Nora, 1994; Gloria & Kurpius, 1996; Hurtado, 1994; LeSure, 1994; Loo & Rolison, 1986) contend that isolation, marginalization, and negative perceptions of the campus environment are saliently present for many ethnic minority students on campus. Altering the campus culture in regards to greater acceptance and understanding of ethnic minorities should be a priority for administrators concerned with the transition and adjustment of Latina students. These results indicate that although sorority membership may assist Latina students in successfully adjusting to campus, membership lacks the power to mitigate negative perceptions of the campus racial environment. When combined with social support, perceptions of campus climate did not significantly explain any of the variance in social adjustment for the sorority group, which may imply that various types of support on campus contribute to their social adaptation. Schneider and Ward (2003) made a similar conclusion in regards to the importance of multiple forms of support for Latino students adjusting to college.

Another interesting finding was that for the non-sorority group, a higher perception of institutional support was a predictor of lower levels of academic

adjustment, social adjustment, and overall adjustment. Although researchers (Quintana et al., 1991; Schneider & Ward, 2003; Zea et al., 1995) have argued that institutional support is important for Latino and other ethnic minority students, the present findings did not confirm this. Administrators be concerned with the variety of services offered for Latino students on campus and should be careful not to use the term "Latino" as an all inclusive term since there is great diversity within the Latino culture. The diversity of needs that Latino students have should be an important consideration when developing campus support programs and services.

For the non-sorority members, higher levels of general peer support were predictors of social adjustment, goal commitment-institutional adjustment, and overall adjustment. For the sorority member group, higher levels of general peer support were also indicators of academic adjustment, social adjustment, goal commitment-institutional adjustment, and overall adjustment. This is an important finding, indicating that Latino students may need more support beyond that of Latino peers in order to successfully transition to campus. Again, administrators should be careful not to assume that all Latino students need to be with Latino peers in order to adjust, and should instead recognize that Latino students have diverse needs. Additionally, administrators should be aware of the ethnic identity development of Latino students since students in different stages of ethnic identity development may reflect different behaviors. For example, those in the later stages of ethnic identity development may be more likely to surround themselves with Latino peers than those in earlier stages. According to this study Latino students may be adjusted, even if they do not surround themselves with Latino peers.

In addition to the findings about general peer support for both groups, Latino peer support was found to be a significant predictor of social adjustment and goal commitment-institutional adjustment for the sorority member group. Social adjustment and goal commitment-institutional adjustment were also the two forms of adjustment found to be significantly different for the two groups. This may indicate that membership in a Latina sorority facilitates increased support from Latino peers since Latina sororities cater to the needs of Latina students.

Family support appeared to be important to the non-sorority group in regards to their academic adjustment, social adjustment, personal-emotional adjustment and overall adjustment. This may be due to the fact that many Latina students maintain a strong commitment to their families once they enter college and continue to adhere to cultural expectations (Gonzalez et al., 2004; A. L. Rodriguez et al., 2000). For the sorority groups, however, family support was only a significant predictor of personal-emotional adjustment. As posited by Olivas (1996) Latina students often join Latina sororities in order to find a family away from home. The current findings validate this assumption since most forms of adjustment were not related to family support for the sorority member group, indicating that the sorority may be providing them with familial support on campus. Membership may also assist them in navigating and alleviating the stress placed upon them by their family and cultural expectations.

Final implications worth noting are related to the amount of variance explained by the model. For the non-sorority member group, a higher percentage of the variance was explained by a combination of the control variables and independent variables than for the sorority group. In reviewing the demographic variables, it appears as though 54% of

the non-sorority member group was in their first or second year in college compared to 27% of the sorority member group. This may indicate that the model is better at predicting adjustment in the first few years of college. Another important finding is that the predictor variables were better at explaining variance in social adjustment and goal commitment-institutional adjustment. This may be explained by the fact that the independent variables measured social support and perceptions of the institution with less attention paid to predictors of academic or personal-emotional adjustment.

Suggestions for Future Research

The present study has validated much of the current literature focusing on the needs of Latino students while enhancing the literature in regards to the Latina student experience. First, a significant amount of variance in adjustment for both groups was predicted by perceptions of campus climate and perceptions of social support after controlling for institutional variables and generational status in the United States. These findings validate much of the current literature; however, there was a range of variance that was not explained. For this reason, future research should continue to explore potential indicators of adjustment for Latina students.

Ethnic identity was not explored in the current study but has been suggested to be related to adjustment (Quintana et al., 1991; Schneider & Ward, 2003; Zea et al., 1995). Additionally, future studies may also want to include academic preparedness as an indicator of adjustment for Latino students since researchers have suggested that ethnic minorities are typically less prepared for college than White students and are more likely to take remedial classes (Ignash, 1997). Another factor that was not explored in this study but may also be related to adjustment was financial concerns since researchers

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(Hernandez, 2000; Longerbeam et al., 2004) have suggested that financial concerns are related to Latino student retention and that issues that affect retention may also be related to transition and adjustment (Rendon, 1995). Resiliency and motivation of Latina students may also be explored further in relation to transition since Rendon (2003) and N. L. Cabrera and Padilla (2004) argued that Latino students are particularly resilient in comparison to other ethnic minorities. Finally, some the variance in adjustment for Latina students may be explained by participation in transitional programs such as the CAMP program at UCI (Throgmorton, 1999) and could be further explored in relation to adjustment for Latina students.

Future research should also continue to explore the outcomes of Latina sorority membership, particularly in regards to the impact that membership has on fostering higher levels of social integration and institutional affinity, both of which were significant to the sorority member group in the present study. Additionally, future research should continue to explore the mitigating effects of Latina sorority membership in regards to perceptions of campus climate and various forms of adjustment. This study and others (Layzer, 2000; Olivas, 1996) have implied that membership may act as a buffer for alleviating some of the pressures of adjustment and cultural incongruity experienced by Latina students, although this was not the focus of the current study and therefore definite conclusions cannot be made. Another suggestion for future research is to compare membership in a Latina sorority to membership in a Black sorority since it has been suggested that Latino students and Black students experience college differently (Throgmorton, 1999). Additionally, a comparison of Latina sorority membership to Latino fraternity membership may also be warranted since it has been argued that Latino

and Latina students experience college differently (Barajas & Pierce, 2001; A. L. Rodriguez et al., 2000).

Future research on Latina students may also focus on academic adjustment and achievement in relation to faculty support on campus. The present results were inconsistent with the results of Schneider and Ward (2003) who determined that faculty support was the most important form of support for the academic adjustment of Latino students while the present study did not reveal any relationship between faculty support and academic adjustment. Additionally, there should be more research conducted on the level and type of support perceived by Latina students in college since the perceived level and type of support varied for each group. In the present study, perceptions of social support and campus climate were significant predictors of adjustment for Latina college students but this topic should be explored further using a variety of techniques and instruments. A longitudinal study may also be warranted in order to gain a deeper insight into the experience of Latina college students.

Appendix A

Perceptions of Social Support Scale

Answer the following questions using the scale provided. (Please mark ONE answer per line).

1	2	3	4	5	6	7

Strongly   *Neither Agree*   *Strongly*
Agree   *Nor Disagree*   *Disagree*

_____ 1. The friendships I have developed on campus are personally satisfying.
_____ 2. I think that my family helps me out financially as much as they can.
_____ 3. I do not feel close to any faculty or staff members on campus.
_____ 4. Minority faculty members actively speak up on the behalf of the needs of Latino students.
_____ 5. If I needed my family for support and understanding, they would be there for me.
_____ 6. I can count on my friends for support.
_____ 7. I do not feel comfortable with most of the students on this campus.
_____ 8. Many of the faculty members that I have contact with are genuinely interested in my point of view.
_____ 9. My family was not supportive of my decision to attend the university I am at.
_____ 10. I often feel uncomfortable in classes because there are relatively few minorities.
_____ 11. Few of the students that I know on campus would be willing to listen to me and help me if I had a personal problem.
_____ 12. The school provides adequate counseling services to help Latino students adjust to the campus.
_____ 13. There are adequate tutoring centers on campus to meet my academic needs.
_____ 14. The school provides an adequate number of Latino speakers and cultural groups throughout the year.
_____ 15. Issues related to my experience are not addressed in the classroom.
_____ 16. There needs to be a stronger Latin-American Studies program at my university.
_____ 17. My interpersonal relationships with others on campus have had a positive influence on my personal growth, attitudes and values.
_____ 18. My family really doesn't understand the college environment and the type of stress I am under.
_____ 19. Most of my friends are not Latinos.
_____ 20. I feel the administration is sympathetic to the needs of Latino students.
_____ 21. I believe many faculty members understand my point of view.
_____ 22. If I needed to, I would feel comfortable using the counseling center on campus.
_____ 23. My family would give me advice about my academic program and possible career choices if I asked for it.

Appendix A (continued)

Perceptions of Social Support Scale

_____ 24. I can not look to my family for support when things at school get stressful.
_____ 25. The low number of minority faculty makes me feel under-represented on this campus.
_____ 26. It has been difficult for me to meet and make friends with other students on campus as a function of my ethnicity.
_____ 27. Participating in Latino orientated groups and activities is not an integral aspect of my life on campus.
_____ 28. It's not important for me to go Latino orientated groups and events.
_____ 29. My family often asks me to do things for them that interfere with my life at college.
_____ 30. There are not enough resources available in the library for serious Latino studies.
_____ 31. I don't think I fit with the Latinos on campus.
_____ 32. My family listens and shows interest in my life at school.
_____ 33. Latino culture is recognized and respected on this campus.
_____ 34. I don't feel like my perspective is relevant and validated in the classroom.
_____ 35. I have found the administration easily accessible when I wanted to address a concern.
_____ 36. My interpersonal relationships with other students on campus have had a positive influence on my intellectual growth and interest in ideas.
_____ 37. I feel like Latino student clubs adequately address the ethnic issues that I am most interested in.
_____ 38. The administration does an adequate job of recruiting Latino freshmen and transfers to my university.
_____ 39. I feel that there are professors that I could go to when I have personal issues related to my ethnicity.
_____ 40. I think that many professors and/or staff on campus have positive images of Latino students.
_____ 41. I don't feel that there are an adequate number of minority professors on this campus.
_____ 42. I am completely comfortable talking about personal issues with the friends that I have on campus.
_____ 43. I would feel comfortable and accepted if I became involved in the Latino student organizations on campus.
_____ 44. I can relate to the issues and topics discussed in class.
_____ 45. There are not any doctors or health care practitioners that I would feel comfortable going to in the health center.
_____ 46. I do not feel uncomfortable being helped by a White health care practitioner at the health center.

Appendix B

University Environment Scale

Respond to the following statements using the scale provided. (Please mark ONE answer per line).

Very True   Not At All
1   2   3   4   5   6   7

_____ 47. Class sizes are so large that I feel like a number.
_____ 48. The library staff is willing to help me find materials/books.
_____ 49. University staff has been warm and friendly.
_____ 50. I do not feel valued as a student on campus.
_____ 51. Faculty have not been available to discuss my academic concerns.
_____ 52. Financial aid staff has been willing to help me with my financial concerns.
_____ 53. The university encourages/sponsors ethnic groups on campus.
_____ 54. There are tutoring services available for me on campus.
_____ 55. The university seems to value minority students.
_____ 56. Faculty have been available for help outside of class.
_____ 57. The university seems like a cold, uncaring place to me.
_____ 58. Faculty have been available to help me make course choices.
_____ 59. I feel as if no one cares about me personally on this campus
_____ 60. I feel comfortable in the university environment.

Appendix C

Sample Items from the Student Adaptation to College Questionnaire

For each of the statements below, use the scale provided to indicate how closely it applies to you at the present time. (Please mark ONE answer per line).

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Applies very closely to me   Doesn't apply to me at all

_____ 61. I feel that I fit in well as part of my college environment
_____ 62. I have been feeling tense of nervous lately
_____ 65. I know why I am in college and what I want out of it
_____ 67. Lately I have been feeling blue and moody a lot
_____ 70. I have not been functioning well during examinations
_____ 72. Being on my own, taking responsibility for myself, has not been easy
_____ 77. I'm not working as hard as I should at my coursework
_____ 78. I have several close social ties at college
_____ 82. Lonesomeness for home is a source of difficulty for me now
_____ 85. I haven't been very efficient in the use of study time lately
_____ 88. I have been having a lot of headaches lately
_____ 92. Lately I have been having doubts regarding the value of a college education
_____ 93. I am getting along very well with my roommate(s) at the college (please omit if you do not have a roommate)
_____ 95. I've put on (or lost) too much weight lately
_____ 98. I have been getting angry too easily lately
_____ 101. I'm not doing well enough academically for the amount of work I put in
_____ 107. I expect to stay at this college for a bachelor's degree
_____ 112. I am having a lot of trouble getting started on homework assignments
_____ 121. I find myself giving considerable thought to taking time off from college and finishing later
_____ 122. I am very satisfied with the professors I have now in my courses
_____ 126. I'm quite satisfied with my academic situation at college
_____ 127. I feel confident that I will be able to deal in a satisfactory manner with future challenges here at college

Appendix D

Background Information

1. Are you a member of a Latina/Hispanic sorority on campus?

   1. Yes
   2. No

2. Which of the following best describes your ethnicity? (Please pick ALL that apply).

   1. Mexican/Mexican American/Chicana
   2. Puerto Rican
   3. Cuban/Cuban American
   4. Dominican/Dominican American
   5. Central American (El Salvadorian, Costa Rican, Guatemalan, Nicaraguan, Panamanian)
   6. South American (Brazilian, Peruvian, Argentinean, Colombian)
   7. Caucasian
   8. Other _____ (please specify)

3. Which of the following best describes your citizenship and/or generation status? (Please pick ONE).

   1. Your grandparents, parents, and you were born in the U.S.
   2. Either or both your parents and you were born in the U.S.
   3. You were born in the U.S., but neither of your parents were
   4. You are a foreign born, naturalized citizen
   5. You are a foreign born, resident alien/permanent resident
   6. You are on a student visa

4. What was the highest level of education completed by your mother/primary female guardian? (Please pick ONE).

   1. High school or less
   2. Some college
   3. Associates degree
   4. Bachelors degree
   5. Masters degree
   6. Doctorate or professional degree (PhD, JD, MD)
   7. Not Sure
   8. Other _____ (please specify)

5. What was the highest level of education completed by your father/primary male guardian? (Please pick ONE).

    1. High school or less
    2. Some college
    3. Associates degree
    4. Bachelors degree
    5. Masters degree
    6. Doctorate or professional degree (PhD, JD, MD)
    7. Not Sure
    8. Other _____

6. Did you transfer to your current institution? (Please pick ONE)

    1. Yes
    2. No

7. How many years have you been enrolled at your institution? (Please pick ONE).

    1. This is my first year
    2. This is my second year
    3. This is my third year
    4. This is my fourth year
    5. This is my fifth year
    6. This is my sixth or more year

8. Which of the following best describes the type of institution you attend? (Please pick ONE).

    1. Public 4-year college/university
    2. Private 4-year college/university
    3. 2-year college/community college

9. Which of the following best describes the size of the institution you attend? (Please pick ONE).

    1. 0 - 9,999 students
    2. 10,000 – 19,999 students
    3. 20,000 – 29,999 students
    4. 30,000 – 39,999 students
    5. 40,000 – 49,999 students

10. Please feel free to make comments of suggestions in this space.

Appendix E

Final Page of Survey: Sorority Member Group

Thanking you for participating in this survey!!

If you are one of the first 5 respondents to this survey, you automatically win a $15 gift certificate to Greek Nation!! Please include your e-mail address below.

ALL respondents are now qualified for a chance to win one of the following:

- o $25 gift certificate to Greek Nation
- o $50 gift certificate to Greek Nation
- o $100 gift certificate to Greek Nation

If you wish to be included in the raffle drawing for a chance to win one of the above prizes, please include your e-mail address below. Please note, your e-mail address will not be connected to your responses and will only be used to contact you if you are a winner. All winners will be contact by April 10, 2005.

| |
| |

Your help is also needed to identify additional students to participate in this study. Your name will be entered in the above raffle drawing for each additional referral made for this study. For example, two referrals will be two additional raffle entries. This will increase your chances of winning and will assist the researcher in completing this study.

Please identify the e-mail address of up to 5 students who possess the following characteristics:
- o NOT members of ANY Latina sorority
- o self-identify as Latina
- o currently enrolled as an undergraduate student

| |
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Appendix F

Final Page of Survey: Non-Sorority Group

Thanking you for participating in this survey!!

If you are one of the first 5 respondents to this survey, you automatically win a $15 cash prize!! Please include your e-mail address below.

ALL respondents are now qualified for a chance to win one of the following:

- o $25 cash prize
- o $50 cash prize
- o $100 cash prize

If you wish to be included in the raffle drawing for a chance to win one of the above prizes, please include your e-mail address below. Please note, your e-mail address will not be connected to your responses and will only be used to contact you if you are a winner. All winners will be contact by April 10, 2005.

Your help is also needed to identify additional students to participate in this study. Your name will be entered in the above raffle drawing for each additional referral made for this study. For example, two referrals will be two additional raffle entries. This will increase your chances of winning and will assist the researcher in completing this study.

Please identify the e-mail address of up to 5 students who possess the following characteristics:
- o   NOT members of ANY Latina sorority
- o   self-identify as Latina
- o   currently enrolled as an undergraduate student

Appendix G

Informed Consent Form

Thank you for agreeing to complete this survey. Before you begin, please review this page which contains information about your rights as a participant. By clicking the "Begin Survey" link below, you are stating that you have read, understand, and agree to the following:

o I am 18 years of age or older and wish to participate in a program of research being conducted by Gina Garcia under the faculty advisement of Dr. Marylu K. McEwen in the Department of Counseling and Personnel Services at the University of Maryland, College Park.

o The purpose of this study is to examine the experiences of Latina college students at a variety of institutions nationwide. If I choose to participate in this study, I will be asked to complete a series of questions about my experiences as a current college student.

o I understand that the survey will take approximately 20 minutes and I may complete it at my own convenience. I also understand that I may discontinue the survey at anytime and return to the same place at a later time.

o All information collected in this study is confidential and my name will not be identified at any time. The data I provide will be grouped with data others provide for reporting and presentation.

o I understand that some of the questions may trigger emotions and/or evoke personal reactions depending on my individual experiences in college.

o Due to the public nature of the Internet, the possibility of my answers being intercepting is possible, although highly unlikely. To avoid this, I will exit or close my Internet browser when I have completed the survey.

o My participation is entirely voluntary and I am free to ask questions or withdraw from participation at any time.

o This study is not designed to help me personally, but my participation will contribute to the current research on an important topic and an understudied population of college students. This research may help campus administrators understand the needs and concerns facing Latina college students.

If you have any questions about participating in this study, please contact Gina Garcia at ggarcia2@umd.edu or 818-631-5478. You may also contact faculty advisor, Dr. Marylu K. McEwen, at mmcewen@umd.edu or 301-405-2871. You may also request the results of this study.

If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; irb@deans.umd.edu; (telephone) 301-405-4212

I wish to participate in this research study. "Begin Survey"
I do not wish to participate in this research study. "Log Out"

Appendix H

Invitation to Participate: Sorority Member Group

Dear [Participant's Name],

As a Sister of Lambda Theta Alpha Latin Sorority, Inc., I would like to cordially invite you to participate in a survey examining the experiences of Latina college students nationwide. My name is Gina Garcia and I am a Sister of Lambda Theta Alpha and I would appreciate your help in completing this research study. Your participation will contribute to the current body of knowledge surrounding Latina college students in hopes that college administrators will use the information to provide necessary support and services. It is also an attempt to further understand the outcomes related to membership in a Latina sorority. The study is also a part of my Master's thesis in the College of Education at the University of Maryland.

Completing the survey is easy and will take approximately 20 minutes. Your answers will remain completely confidential. You can access the survey at the website below.

As a token of appreciation for your participation, there will be a series of incentives offered to you. **The first 5 respondents to the survey will automatically receive a $15 gift certificate to Greek Nation**. All respondents will also be eligible for a raffle drawing with a chance to win gift certificates to Greek Nation. There will be one $25 gift certificate awarded, one $50 gift certificate, and one $100 gift certificate. You will also be given additional opportunities to enter the raffle drawing by referring contact names for this survey. Please be sure to complete the referral page at the end of the survey in order to assist me with my research. The peers whom you refer will also be eligible for a raffle drawing. In order to be considered for the drawing, please be sure to include your email address when requested. Winners will be contacted by April 10, 2005.

Your participation in this study is very important and will help us to better understand the needs and experiences of Latina college students. If you have any questions or concerns, please do not hesitate to contact me or my faculty advisor. Thank you in advance for your participation.

Sorority Salutation,

Gina Garcia   Dr. Marylu K. McEwen
Lambda Theta Alpha Latin Sorority, Inc.   Faculty Advisor
Alpha Delta Chapter   Department of Counseling and
Graduate Student   Personnel Services
University of Maryland   University of Maryland
ggarcia2@umd.edu   mmcewen@umd.edu
(818) 631-5478   (301) 405-2871

Appendix I

Invitation to Participate: Non-Sorority Member Group

Dear [Participant's Name],

I would like to cordially invite you to participate in a survey examining the experiences of Latina college students nationwide. Your name was submitted to me by a peer who has already completed the survey and recommended you as a participant. Your participation will contribute to the current body of knowledge surrounding Latina college students in hopes that college administrators will use the information to provide necessary support and services. The study is also a part of my Master's thesis in the College of Education at the University of Maryland.

Completing the survey is easy and will take approximately 20 minutes. Your answers will remain completely confidential. You can access the survey at the website below.

As a small token of appreciation for your participation, there will be a series of incentives offered to you. **The first 5 respondents to the survey will automatically receive a $15 cash prize**. All respondents will also be eligible for a raffle drawing with a chance to win cash prizes. There will be one $25 cash prize awarded, one $50, and one $100 cash prize. You will also be given additional opportunities to enter the raffle drawing by referring contact names for this survey. Please be sure to complete the referral page at the end of the survey in order to assist me with my research. The peers whom you refer will also be eligible for a raffle drawing. In order to be considered for the drawing, please be sure to include your email address when requested. Winners will be contacted within 3 weeks following the conclusion of data collection.

Your participation in this study is very important and will help us to better understand the needs and experiences of Latina college students. If you have any questions or concerns, please do not hesitate to contact me or my faculty advisor. Thank you in advance for your participation.

Sincerely,

Gina Garcia   Dr. Marylu K. McEwen
Graduate Student   Faculty Advisor
University of Maryland   Department of Counseling and
ggarcia2@umd.edu   Personnel Services
(818) 631-5478   University of Maryland
                                                       mmcewen@umd.edu
                                                       (301) 405-2871

Appendix J

First Reminder: Sorority Member Group

Dear [Participant's Name],

Hello Sister!! Last week, you were sent an e-mail message inviting Sisters of Lambda Theta Alpha Latin Sorority, Inc. to participate in a survey about your experiences as a Latina college student. The study is an attempt to further understand the outcomes related to membership in a Latina sorority.

Please consider taking 20 minutes to complete the survey. It is easy and your answers will remain completely confidential. You can access the survey at the website below. Remember, when you complete the survey, you are eligible for a raffle drawing for a $25 gift certificate to Greek Nation, one $50 gift certificate, or one $100 gift certificate.

If you start the survey but do not complete it, you can return to the same place at a later time. If you have difficulty accessing the website or completing the survey, please contact me by phone or by replying to this message.

Your participation in this study is very important. By participating, you will be contributing to the current research on the experiences and needs of Latina college students. If you have any questions or concerns, please contact me or my faculty advisor. Thank you in advance for your help.

Sorority Salutation,

Gina Garcia
Lambda Theta Alpha Latin Sorority, Inc.
Alpha Delta Chapter
Graduate Student
University of Maryland
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Appendix K

First Reminder: Non-Sorority Member Group

Dear [Participant's Name],

Hello again. Last week, you were sent an e-mail message inviting you to participate in a survey about your experiences as a Latina college student. Your name was submitted to me by a peer who has already completed the survey and recommended you as a participant

Please consider taking 20 minutes to complete the survey. It is easy and your answers will remain completely confidential. You can access the survey at the website below.

Remember, when you complete the survey, you are eligible for a raffle drawing for a $25 cash prize, one $50 cash prize, or one $100 cash prize.

If you have difficulty accessing the website or completing the survey, please contact me by phone or by replying to this message. If you do not wish to participate, you can send a reply message requesting to be removed from the distribution list.

Your participation in this study is very important. By participating, you will be contributing to the current research on the experiences and needs of Latina college students. If you have any questions or concerns, please contact me or my faculty advisor. Thank you in advance for your help.

Sincerely,

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Appendix L

Second Reminder: Sorority Member Group

Dear [Participant's Name],

Hello once again Sister!! I wanted to remind you that there is only one week left to participate in the survey examining the experiences of Latina college students. You still have a chance to complete the survey in order to be eligible for the raffle drawing for a $25 gift certificate to Greek Nation, one $50 gift certificate, or one $100 gift certificate. You will also be helping your Sister obtain her Master's degree and learn more about the outcomes of Latina sorority membership. Please follow the link below to access the survey.

Remember, it will only take 20 minutes to complete and your answers will remain confidential.

If you have difficulty accessing the website or completing the survey, please contact me by phone or by replying to this message. If you do not wish to participate, please ignore this message.

The survey will be available until Sunday, March 27, 2005. If you have any questions or concerns, please contact me or my faculty advisor. Thank you very much for your help.

Sorority Salutation,

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Appendix M

Second Reminder: Non-Sorority Member Group

Dear [Participant's Name],

Hello once again. I wanted to remind you that there is still time to participate in the survey examining the experiences of Latina college students. You still have a chance to complete the survey in order to be eligible for the raffle drawing for a $25 cash prize, one $50 cash prize, or one $100 cash prize. Please follow the link below to access the survey.

Remember, it will only take 20 minutes to complete and your answers will remain confidential.

If you have difficulty accessing the website or completing the survey, please contact me by phone or by replying to this message. If you do not wish to participate, please ignore this message.

The survey will be available until Sunday April 3, 2005. If you have any questions or concerns, please contact me or my faculty advisor. Thank you very much for your help.

Sincerely,

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Appendix N

Correlation Matrix of Academic Adjustment, Campus Climate, and Social Support: Sorority (N=183)

	1	2	3	4	5	6	7	8	9	10
1. Academic Adjustment	__									
2. Type	.03	__								
3. Size	.01	-.52***	__							
4. Citizenship	.04	.03	-.14*	__						
5. Campus Climate	-.51***	.01	.14*	-.02	__					
6. Institutional Support	-.30***	.09	-.08	-.01	.64***	__				
7. Faculty Support	-.41***	.03	-.01	-.03	.68***	.69***	__			
8. Latino Peer Support	-.16*	.19*	-.10	-.04	.28***	.13*	.12*	__		
9. General Peer Support	-.38***	.15*	-.13*	.03	.47***	.43***	.43***	.44***	__	
10. Family Support	-.20**	-.08	-.06	.10	.24***	.24***	.24***	.09	.23***	__

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

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Appendix O

Correlation Matrix of Social Adjustment, Campus Climate, and Social Support: Sorority (N=183)

	1	2	3	4	5	6	7	8	9	10
1. Social Adjustment	__									
2. Type	-.04	__								
3. Size	.00	-.52***	__							
4. Citizenship	-.03	.03	-.14*	__						
5. Campus Climate	-.43***	.01	.14*	-.02	__					
6. Institutional Support	-.27***	.09	-.08	-.01	.64***	__				
7. Faculty Support	-.42***	.03	-.01	-.03	.67***	.69***	__			
8. Latino Peer Support	-.42***	.19**	-.10	-.04	.28***	.13*	.12*	__		
9. General Peer Support	-.63***	.16*	-.13*	.03	.47***	.35***	.43***	.44***	__	
10. Family Support	-.09	-.08	-.06	.10	.24***	.33***	.24***	.09	.23***	__

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

Appendix P

Correlation Matrix of Personal Emotional Adjustment, Campus Climate, and Social Support: Sorority (N=183)

	1	2	3	4	5	6	7	8	9	10
1. Personal Emotional Adjustment	__									
2. Type	.05	__								
3. Size	.02	-.52***	__							
4. Citizenship	.01	.03	-.14*	__						
5. Campus Climate	-.37***	.01	.14*	-.02	__					
6. Institutional Support	-.29***	.09	-.08	-.01	.64***	__				
7. Faculty Support	-.31***	.03	-.01	-.03	.67***	.69***	__			
8. Latino Peer Support	-.14*	.19**	-.10	-.04	.28***	.13*	.12*	__		
9. General Peer Support	-.31***	.16*	-.13*	.03	.47***	.35***	.43***	.44***	__	
10. Family Support	-.29***	-.08	-.06	.10	.24***	.33***	.24***	.09	.23***	__

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

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Appendix Q

Correlation Matrix of Goal Commitment-Institutional Adjustment, Campus Climate, and Social Support: Sorority (N=183)

	1	2	3	4	5	6	7	8	9	10
1. Goal Commitment Adjustment	__									
2. Type	.02	__								
3. Size	.00	-.52***	__							
4. Citizenship	-.01	.03	-.14*	__						
5. Campus Climate	-.51***	.01	.14*	-.02	__					
6. Institutional Support	-.35***	.09	-.08	-.01	.64***	__				
7. Faculty Support	-.45***	.03	-.01	-.03	.68***	.69***	__			
8. Latino Peer Support	-.40***	.19**	-.10	-.04	.28***	.13*	.12*	__		
9. General Peer Support	-.62***	.16*	-.13*	.03	.47***	.35***	.43***	.44***	__	
10. Family Support	-.20**	-.08	-.06	.10	.24***	.33***	.24***	.09	.23***	__

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

Appendix R

Correlation Matrix of Overall Adjustment, Campus Climate, and Social Support: Sorority (N=183)

	1	2	3	4	5	6	7	8	9	10
1. Overall Adjustment	__									
2. Type	.02	__								
3. Size	.02	-.52***	__							
4. Citizenship	.01	.03	-.14*	__						
5. Campus Climate	-.53***	.01	.14*	-.02	__					
6. Institutional Support	-.34***	.09	-.08	-.01	.64***	__				
7. Faculty Support	-.46***	.03	-.01	-.03	.68***	.69***	__			
8. Latino Peer Support	-.29***	.19**	-.10	-.04	.28***	.13*	.12*	__		
9. General Peer Support	-.53***	.16*	-.13*	.03	.47***	.35***	.43***	.44***	__	
10. Family Support	-.24***	-.08	-.06	.10	.24***	.33***	.24***	.09	.23***	__

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

Appendix S

Correlation Matrix of Academic Adjustment, Campus Climate, and Social Support for Non-Sorority (N=131)

	1	2	3	4	5	6	7	8	9	10
1. Academic Adjustment	__									
2. Type	.01	__								
3. Size	-.06	-.65***	__							
4. Citizenship	-.07	.07	.02	__						
5. Campus Climate	-.52***	.01	.05	.17*	__					
6. Institutional Support	-.22**	.23**	-.16*	.12	.60***	__				
7. Faculty Support	-.35***	.14	-.01	.20**	.67***	.77***	__			
8. Latino Peer Support	-.06	.06	-.07	.13	.24**	.05	.06	__		
9. General Peer Support	-.35***	.02	.02	.17*	.58***	.48***	.52***	.31***	__	
10. Family Support	-.34***	.08	-.06	.10	.35***	.25**	.25**	.25**	.35***	__

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

Appendix T

Correlation Matrix of Social Adjustment, Campus Climate, and Social Support for Non-Sorority (N=131)

	1	2	3	4	5	6	7	8	9	10
1. Social Adjustment	__									
2. Type	.06	__								
3. Size	.03	-.65***	__							
4. Citizenship	-.13	.07	.02	__						
5. Campus Climate	-.59***	.01	.05	.17*	__					
6. Institutional Support	-.28***	.23**	-.16*	.12	.60***	__				
7. Faculty Support	-.40***	.14	-.01	.20**	.67***	.77***	__			
8. Latino Peer Support	-.26***	.06	-.07	.13	.24**	.05	.06	__		
9. General Peer Support	-.72***	.02	.02	.17*	.58***	.48***	.52***	.31***	__	
10. Family Support	-.36***	.08	-.06	.10	.35***	.25**	.25**	.25**	.35***	__

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

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Appendix U

Correlation Matrix of Personal Emotional Adjustment, Campus Climate, and Social Support for Non-Sorority (N=131)

	1	2	3	4	5	6	7	8	9	10
1. Personal Emotional Adjustment	__									
2. Type	-.05	__								
3. Size	-.02	-.65***	__							
4. Citizenship	-.06	.07	.02	__						
5. Campus Climate	-.46***	.01	.05	.17*	__					
6. Institutional Support	-.26**	.23**	-.16*	.12	.60***	__				
7. Faculty Support	-.35***	.14	-.01	.20**	.67***	.77***	__			
8. Latino Peer Support	-.14*	.06	-.07	.13	.24**	.05	.06	__		
9. General Peer Support	-.36***	.02	.02	.17*	.58***	.48***	.52***	.31***	__	
10. Family Support	-.41***	.08	-.06	.10	.35***	.25**	.25**	.25**	.35***	__

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

Appendix V

Correlation Matrix of Goal Commitment-Institutional Adjustment, Campus Climate, and Social Support for Non-Sorority (N=131)

	1	2	3	4	5	6	7	8	9	10
1. Goal Commitment Adjustment	__									
2. Type	.08	__								
3. Size	.01	-.65***	__							
4. Citizenship	-.08	.07	.02	__						
5. Campus Climate	-.59***	.01	.05	.17*	__					
6. Institutional Support	-.35***	.23**	-.16*	.12	.60***	__				
7. Faculty Support	-.40***	.14	-.01	.20**	.67***	.77***	__			
8. Latino Peer Support	-.19*	.06	-.07	.13	.24**	.05	.06	__		
9. General Peer Support	-.67***	.02	.02	.17*	.58***	.48***	.52***	.31***	__	
10. Family Support	-.36***	.08	-.06	.10	.35***	.25***	.25***	.25***	.35***	__

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

Appendix W

Correlation Matrix of Overall Adjustment, Campus Climate, and Social Support for Non-Sorority (N=131)

	1	2	3	4	5	6	7	8	9	10
1. Overall Adjustment	__									
2. Type	.02	__								
3. Size	-.02	-.65***	__							
4. Citizenship	-.10	.07	.02	__						
5. Campus Climate	-.62***	.01	.05	.17*	__					
6. Institutional Support	-.30***	.23**	-.16*	.12	.60***	__				
7. Faculty Support	-.42***	.14	-.01	.20**	.67***	.77***	__			
8. Latino Peer Support	-18*	.06	-.07	.13	.24**	.05	.06	__		
9. General Peer Support	-.56***	.02	.02	.17*	.58***	.48***	.52***	.31***	__	
10. Family Support	-.43***	.08	-.06	.10	.35***	.25**	.25**	.25**	.35***	__

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

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