#### CHAPTER ONE

### INTRODUCTION

The United States has undergone a dramatic demographic shift in the last 40 years, particularly in terms of the racial and ethnic composition of the country. For example, in 1960, Asians were approximately 0.3% of the United States' population and by 1970 that percentage had grown to approximately 0.5% (Gall & Gall, 1993). The 1990 census reported that Asians were 3% of the U.S. population, which represented a 99 % increase from the 1980 census report ("We the American...Asians", 1993).

The Black population has also experienced a significant increase over the last 40 years. In 1960, Blacks were approximately 10% of the U.S. population and in 1970 that percentage had increased to11%. The Black population continued to grow throughout the 1980s and 1990s. In 1980, the Black population was 11.3% and by 1990 it had increased to 12% ("We the American...Blacks", 1993).

Like the other racial and ethnic minority groups, the Hispanic population is also a rapidly increasing segment of the United States. In 1950, Hispanics were approximately 1.5% of the U.S. population and in 1970, that percentage grew to 4.4%. In 1990, Hispanics were almost nine percent of the total U.S. population. The Census Bureau estimates that the Hispanic population could rise to 81 million by the year 2050 ("We the American...Hispanics", 1993).

These dramatic shifts in the United States' demographics have affected many of the country's social institutions. Consider, for example, the political arena. Since 1970, the number of Black elected officials has risen steadily. In 1970 there were a total of 1,479 Black elected officials in the U.S. The majority of those (719) were elected to city and

county offices and only 179 were elected to positions at the state and federal level. In 1980, the total number of Black elected officials grew to 4,963. The majority of the officials were elected to city and county offices. By 1990, there were 4,481 Black city and county officials and 440 Blacks serving in state and federal positions, for a total of 7,335 Black elected officials (Garwood, 1993a).

There has also been a steady increase in the number of Hispanic elected officials in recent years. In 1985, there were a total of 3,147 Hispanic elected public officials, most of whom served in county and municipal offices or on school boards. By 1988, that number had grown to 3,360 Hispanic elected public officials, including 124 state executives and legislators and 574 judicial and law enforcement officials. By 1991, the number of Hispanic elected officials increased to 4,202. There were 1,865 county and municipal officials and 143 state executives and legislators. (Garwood, 1993b).

But the political arena is not the only social institution affected by the changing demographics in the United States. Education has also been affected by these changes.

Primary and secondary education have experienced a dramatic demographic shift in terms of race and ethnicity in the last 20 years. In 1980, approximately 15% of children enrolled in elementary school were Black. In 1985 4,307,000 Black children enrolled in elementary school and in 1990 that number grew to 4,627,000 (Garwood, 1993a).

The elementary school enrollment for Hispanic children has also increased in the last two decades. In 1980, approximately 8.6% of children were enrolled in elementary school were Hispanic. By 1985, that percentage actually decreased to 7.8%, but by 1990 the percent of Hispanic children enrolled in elementary increased again to 11% of the total enrollment (Garwood, 1993b).

An examination of high school enrollment among Black and Hispanic children reveals a different pattern than the elementary school enrollment. In 1980, 2,200,000 Black students were enrolled in high school. In 1985, that number had decreased to 2,131,000 and in 1990 the number of Blacks enrolled in high school dropped again to 1,975,000 (Garwood, 1993a).

High school enrollment among Hispanics has increased steadily, however. Hispanic student high school enrollment was 1,048,000 in 1980. By 1985, that number had increased to 1,156,000 and in 1990 there were 1,437,000 Hispanics enrolled in American high schools (Garwood, 1993b).

While elementary and secondary education systems have experienced increased enrollments among minority students, higher education has also been affected by demographic shifts in the U.S. In 1976, there were 169,300 Asian undergraduates enrolled in college. By 1990, that number rose to 500,500 and in 1996 there were 717,600 Asian college students enrolled in higher education ("College Enrollment," 1998). The enrollment figures for Asian students in higher education reflect an increase of 324% since 1976.

In 1976, Blacks represented 10% of all students enrolled in higher education in America, while Whites represented 82% of all post secondary students. By 1990, the Black college enrollment had grown to 1,147,200. Most recently, in 1996, Black college enrollment was 11% of total enrollment and White college student enrollment was 71% of total college enrollment ("College Enrollment," 1998).

College enrollments for Hispanics, like other minority groups, have increased since the 1970s. In 1976, Hispanic students were 4% of the total college enrollment. In 1990,

Hispanics were approximately 6% of total college enrollment and in 1996 the percentage grew to approximately 9% of the total undergraduate college enrollment ("College Enrollment," 1998).

Although the numbers of racial and ethnic minorities enrolled in college have increased, that growth has not been proportionate to the changing numbers in the United States' population. The Asian population is different from the other minority groups because its representation in higher education is greater than its representation in the U.S. population. In the 1970s, Asians were approximately 0.5% of the total U.S. population. During this same decade, there were 169,300 Asian students enrolled in higher education which represented 2% of the total college enrollment. In 1990, Asians increased to 3% of the U.S. population and there were 717,600 enrolled Asian college students, which was 6% of the total college enrollment ("College Enrollment,", 1998; "We the American...Asians", 1993).

Unlike the Asian population, the disparity between the number of Blacks in the U.S. population and the number of Blacks enrolled in college shifted in the last two decades. In the late 1970s and early 1980s, Blacks were 9% of the U.S. population. During this time period, 943,400 or 10% of total college enrollment were Blacks. Most recently in the 1990s, the disparity between the Black population and Black college enrollment actually increased. The Black population increased to over 30 million yet college enrollment was a little over one million. This reflects a Black U.S. population (12%) that is disproportionately (10%) represented in higher education ("College Enrollment," 1998; "We the American...Blacks", 1993).

The disparity between representation in the population and representation in higher education is also seen in the enrollment trends for Hispanic students. In the 1970s, there were over 9 million Hispanics reported in the U.S. census. College enrollment in 1976 for Hispanics was 4% of the total college enrollment. The 1990 census reported that Hispanics were 9% of the total U.S. population, yet the 724,600 Hispanic students enrolled in higher education represented only 6% of all students in college ("College Enrollment," 1998; "We the American...Hispanics", 1993).

These gaps between minority growth in the general population and minority college enrollment are due to several factors, including income level, high school drop out rates, and the college choice process. In 1980, the median income level for Black families was \$12,674. The median income for Black families was \$16,786 in 1985. In 1990, median Black income was \$21,423 and in 1995, it increased to \$25,970. The 1995 median income for Black families was approximately \$17,000 less than the median income for White families ("Money income," 1997). The low median incomes could limit a Black student's ability to go to college because the family cannot afford college tuition. Black students may also be limited in terms of what type of college to attend due to cost (Chapman, 1981; Sevier, 1993).

The median income for Hispanic families in 1980 was \$14,716, or over \$7,000 less than median income for White families for that year. In 1985, Hispanic median income increased to \$19,027 and in 1990 it was \$23,431. The median income for Hispanics was \$24,570 in 1995 compared to a median income for White families of \$42,646 ("Money income,", 1997). Like Black students, Hispanic students are also limited in their ability to go to college due to their families' incomes. Some Hispanic students are also limited

because they are obligated to work in order to contribute to the family income (Chapman, 1981; Pounds, 1987; Solmon & Wingard, 1991).

Another factor contributing to the gap between minority representation in the general population and minority representation in college enrollment is the high school drop out rate. In 1970, 1,047 Black students dropped out of high school. In 1980, 934,000 Black students and 919,000 Hispanic students dropped out of high school. In 1990, the number of Black drop outs decreased to 611,000, but the number rose for Hispanic students to 1,122,000. This same pattern held true in 1995 as well. That year there were 605,000 Black and 1,355,000 Hispanic high school dropouts ("High School,"1997).

One other factor that influences the gap between the number of minorities in the general population and the number of minorities in higher education is the college choice process. Studies on college choice have found that several factors influence a student's decision about which college to attend. Chapman (1981) identified two groups of influences: external influences and student characteristics. External influences can be conceptualized in three categories: (a) the influence of significant persons, (b) the fixed characteristics of the institution, and (c) the institution's own efforts to communicate with prospective students. Significant persons include friends, parents, and high school personnel. Students are persuaded by the comments and advice of significant persons when selecting a college (Chapman, 1981).

Cost, financial aid, location, and availability of program are the elements of fixed college characteristics. These characteristics are all within the power of the institution to

modify over time. The fixed college characteristics also tend to define the institution (Chapman, 1981).

College efforts to communicate with students consist of written information, campus visits, and admissions recruiting. Colleges use these different methods as a part of their marketing approach (Chapman, 1981).

The second group of influences identified by Chapman (1981) relate to student characteristics. Student characteristics include socioeconomic status, aptitude, level of educational aspiration and expectation, and high school performance. Socioeconomic status influences the rates at which students enter higher education and the types of universities they attend, among other things.

Aptitude, on the other hand, influences high school achievement and performance on college entrance examinations. Students tend to self-select institutions that enroll students with similar aptitudes as themselves (Chapman, 1981).

The third student characteristic is educational aspirations and expectations.

Educational expectations are what a person perceives he or she will be doing or will have accomplished at some future date. On the other hand, educational aspirations are wishes or desires about one's future (Chapman, 1981).

The final student characteristic in the Chapman model, high school performance, is a basis on which colleges accept or reject students. Colleges describe the type of student they want to admit in terms of high school GPA and class rank. Students with good academic records receive more encouragement to continue their education, more college advising, and more college scholarships (Chapman, 1981).

While Chapman conceptualized a model of college choice process, other scholars have examined that process in some detail. Smith and Matthews (1991) explored how students choose a particular college. A phone survey was conducted with 566 freshmen who were admitted to a large public university in the southwest. The survey examined the important factors in choosing a college. Students reported that the prospect of getting a job after college, the opportunity to pursue an advanced degree, academic reputation, and reasonable cost were the most important factors in choosing a college.

Other scholars have explored the college choice process among minority students. In one such study (Sevier, 1993), a survey was administered to 1,127 college bound African American high school juniors. Results revealed that the four most important college characteristics to African Americans are reputation of the college, availability of a specific major, cost of attending, and availability of financial aid. The participants in the study were looking for a college that had all the characteristics that they felt were important when making their college choice.

Demographic characteristics and academic variables of minority students have also been studied to gain a better understanding of college choice. In one such study (Arbona & Novy, 1991), the with-in group differences among Hispanic college students were examined. A survey was administered to 186 incoming Hispanic freshmen. The subgroups of Hispanic students included Mexican American, Puerto Rican, Central American, and South American. Results revealed that non-Mexican American students report considerably higher parental socio-economic status and higher educational levels for both father and mother than do Mexican American students. Results also revealed that a larger percentage of Mexican American students report being certain that they will obtain a

college degree than non-Mexican American students. Overall, the results reveal that the subgroups of Hispanic college students may differ considerably in terms of demographic characteristics and academic variables, thus influencing their college choice (Arbona & Novy, 1991).

Colleges and universities use studies on college choice to develop recruitment strategies. Institutions take into account the factors that students rate as most important when making a college choice and highlight those factors when marketing the campus to potential students (Chapman, 1981).

Colleges and universities work hard to recruit students who qualify for admission. But one area in which institutions have not succeeded is their efforts to recruit minority students. If the institutions want to reflect the demographics in the U.S., greater effort is needed in the area of minority recruitment.

In order for colleges to be able to recruit more minority students, more research needs to be conducted on the college choice process among minority students. The information produced by such studies might enable colleges and universities to develop recruitment strategies that can be targeted at different minority populations.

Currently, research on minority college choice is limited. Most of the research on college choice focuses on the factors that influence majority students (Solmon & Wingard, 1991). There are some studies that include minorities in their samples, but results are not aggregated by race so information on the differences between White and minority students in general is limited (Martin & Dixon, 1991).

Research on the differences in the college choice process among various minority groups (e.g. Blacks, Hispanics) is also limited. It is important to study individual minority

groups because there may be differences in the factors that students of different races consider when making a college choice. Therefore, additional research is needed on college choice among different types of minority groups. This study looks at one such group, Hispanics.

Hispanics in the United States are one of the fastest growing populations in the nation. Despite this rapid population growth, Hispanic college enrollment has increased slowly ("We the American...Hispanics,", 1993). More information about the factors influencing Hispanics' college choice could contribute to Hispanic student recruitment efforts. The present study was designed to fill this gap in the existing literature on the college choice process.

# Purpose of the Study

The purpose of this study was to examine the factors that influence the college choice process for Hispanic students. For purposes of the study, the college choice process consisted of two phases: the college search phase and the college selection phase. The college search phase consisted of the factors Hispanic students considered when applying to colleges. The college selection phase consisted of the factors Hispanic students considered when deciding which of the colleges to which they were admitted they wanted to attend. Differences among Hispanics in factors influencing the college choice process were examined by gender, generational status (first generation v. non-first generation), and ethnic background (Mexican, Puerto Rican, Central American, South American).

The present study also examined differences in the influence of internal and external factors on the college choice process of Hispanic students. In the present study, internal factors consisted of those factors over which the student had some or all control.

Some examples of internal factors were availability of financial aid, diversity of student body, and expectations of friends and family. External factors were defined as factors over which the institution had primary control. For example, size of the college, majors offered, tuition, and location were considered external factors.

The study was designed to gain a better understanding of how Hispanics make decisions about higher education. Data were collected by surveying Hispanic students about their college choice process.

## **Research Questions**

The present study examined the following research questions:

- 1. Are there significant differences in the internal factors that influence Hispanic students' search process by gender, generational status, or ethnic background?
- 2. Are there significant differences in the internal factors that influence Hispanic students' selection process by gender, generational status, or ethnic background?
- 3. Are there significant differences in the external factors that influence Hispanic students' search process by gender, generational status, or ethnic background?
- 4. Are there significant differences in the external factors that influence Hispanic students' selection process by gender, generational status, or ethnic background?

## Significance of the Study

The present study was significant for both future practice and future research in higher education. In terms of practice, the results of this study might inform several

constituencies, including student affairs professionals, Hispanic students, and the parents of Hispanic students.

Student affairs professionals, such as those in admissions, might use the results of this study to redesign recruitment and admissions programs. The results revealed the factors Hispanic students consider when deciding on a college to attend. Such information might enable admissions staff to redesign their strategies to attract Hispanics. Such strategies may contribute to an increased enrollment of Hispanic students.

Hispanic students might also use the results to identify different methods of getting to college. Understanding what other Hispanic students have considered when selecting a college may help Hispanic applicants in their own college choice process. This knowledge may enable them to think more carefully about the decisions they make as they prepare to go to college.

The parents of the Hispanic students might also benefit from the study. Parents might learn how they can support their children through the college choice process. They might also learn what role, if any, they play in their children's college choice process.

In terms of research, this study was designed to explore the process of selecting a college among Hispanic students. Future studies might employ the methodology used in this study to explore the process of selecting a college for other minority groups, such as Blacks, Asians, and Native Americans.

Another future study might examine how specific factors influence the college choice process for minorities. For example, socioeconomic status has been identified as a factor that influences college choice. Future research may wish to compare the relative

influence of socioeconomic status between White and minority students, or among populations of minority students.

Other studies might look at recruitment and retention efforts targeted at minority students at different types of institutions. Such studies might utilize the results revealed in the present study to further explore the factors involved in college search and selection for minority students.

### Limitations

As with all research, the present study was not without some limitations. First, this research only examined Hispanic students at one institution. Hence, the results only revealed information about Hispanic students at this specific institution and should not be generalized to Hispanic students at other institutions.

Second, the technique used to collect data was a quantitative survey. This technique may have limited the responses of the participants. Quantitative surveys cannot probe in depth into participants' opinions and feelings.

Third, the instrument was designed by the researcher, who is of Hispanic heritage. It is possible that this led to researcher bias. The instrument might have contained items that are biased. If this occurred, the results might have been skewed in some way.

Despite these limitations, this study was valuable because it filled a gap in the existing literature about the college choice process among Hispanic students. The growing population of Hispanics in the country is not reflected in higher education enrollments. If the opportunities available to college graduates are to be made available to all U.S. citizens, then higher education needs to do a better job of recruiting Hispanic students. To recruit more Hispanic students, institutions need to know what factors influence Hispanic

students' college choice. Results from the present study might reveal to higher education how to better recruit Hispanic students.

# Organization of the Study

This study is organized in five chapters. The first chapter served as a general introduction to the issue under study and described the purpose and significance of the research. Chapter Two provides a review of the related literature. The third chapter describes the methodology utilized in the study, including sampling techniques, instrumentation, and data collection and analysis procedures. Chapter Four presents the findings from the study. The final chapter includes a summary and discussion of those findings and their implications for future research and practice.

#### CHAPTER TWO

### REVIEW OF THE LITERATURE

To examine the topic under study, it was necessary to explore several bodies of literature related to college choice. First, the literature on Hispanic students is reviewed. This includes discussions about the different ethnic backgrounds, generational statuses, and educational attainments of Hispanic college students. Second, the literature on the factors influencing college choice in general is described. This includes discussions about the factors that influence the college choice of majority and minority students. Third, literature on generational status and factors in college choice is reviewed. The review is organized around studies on first and non-first generation college students. Fourth, the literature on gender differences in factors influencing college choice is reviewed. Finally, the model of college choice used to design this study is reviewed.

# Hispanic Students

Hispanic students encompass a diverse group of people. Hispanics are of Mexican, Puerto Rican, Cuban, and Central or South American descent. Hispanics also differ in socioeconomic status, educational attainment, immigration status, and race (Arbona & Novy, 1991).

A study on Hispanic college students examined within-group differences (Arbona & Novy, 1991). Participants in the study included 186 incoming Hispanic freshmen at a large, predominantly White public university in the southwest. Participants completed a survey during freshmen orientation. The subgroups of Hispanics in the study were Mexican American, Puerto Rican, Central American, and South American. The researchers grouped the Puerto Rican, Central, and South American students and referred

to them as non-Mexican American. The results revealed that a larger number of non-Mexican American than Mexican American students are born outside of the U.S.

Additionally, non-Mexican American students report higher parental socioeconomic status and higher educational levels for both father and mother than do Mexican American students (Arbona & Novy, 1991).

The results for academic variables revealed that 71% of non-Mexican American students and 60% of Mexican American students expect to pursue a graduate degree. On the other hand, 39% of Mexican American students and 22% of non-Mexican American students report being certain that they would obtain a college degree. Finally, more Mexican American students report that financial problems and academic difficulties are causes for discontinuing their studies. Despite these differences, both Hispanic subgroups are similar in academic performance and retention rates. The researchers suggest that differences in English fluency between the subgroups may have counteracted the relationship between socioeconomic status and academic performance. Overall, the results of this study suggest that the demographic variables of the Hispanic subgroups may impact the students' success in college (Arbona & Novy, 1991).

A study on generational status, family background, and educational attainment compared Hispanic youth to non-Hispanic White youth (Ortiz, 1986). Participants in the study included 6,277 Hispanic and non-Hispanic White youth between the ages of 16 and 21. The data used in this analysis were from the first-year interviews collected in 1979 of a five-year longitudinal survey. The Hispanic youth were also divided into subgroups by ethnic background. The subgroups included Mexican, Puerto Rican, and other Hispanics. Results revealed that Hispanics are disadvantaged when compared to non-Hispanic Whites

in terms of family background characteristics. The parents of Hispanic students have, on average, approximately eight to nine years of schooling and the parents of non-Hispanic White students have an average of 12 years of schooling. Hispanics are also twice as likely to be delayed in school and to have dropped out of high school. Gender differences in educational attainment were also revealed. Both Hispanic and non-Hispanic White females perform better academically than their male counterparts (Ortiz, 1986).

Generational status and ethnic background also had an effect on educational attainment. First generation Hispanic youth are educationally disadvantaged. Among first generation youth, Mexicans are the most disadvantaged educationally, followed by Puerto Ricans, and the least disadvantaged are other Hispanics. Second generation Hispanic youths have higher educational achievement levels and no differences exist in the educational attainment of second generation Mexican and Puerto Rican youth, yet other second generation Hispanics have a slightly higher level of attainment. Third generation Hispanic youths do not differ significantly from non-Hispanic White youths in terms of educational achievement. On the other hand, third generation Mexicans are more disadvantaged than other Hispanics in educational attainment (Ortiz, 1986).

Hurtado (1992) studied the college choice patterns among high-achieving Hispanic students. Participants included 1,342 high-achieving Hispanic students. These students were among the top scorers on standardized tests administered in the junior year of high school. Over 77% of the participants earned a grade point average of A- or better, and over 65% ranked in the top tenth percentile of their high school class. The students were also from five different ethnic backgrounds: Central American, Cuban, Mexican American, Puerto Rican, and South American. Participants completed a comprehensive follow-up

survey of college student experiences. Results revealed that 73% of the high-achieving group attend their first choice college and only one third select a college over 500 miles away from home. These results suggest that a majority of Hispanic students prefer a college that is close to home (Hurtado, 1992).

Results also revealed Chicanos are more likely to attend larger colleges that enroll high numbers of Hispanic students than Latin/Central American students. Another result revealed that Latin/Central American students select higher cost institutions than Chicano or Puerto Rican students. Chicanos, on the other hand, are more likely to attend public colleges or universities. Latin/Central American students are also more likely to apply to more colleges and be admitted to more colleges than Chicano and Puerto Rican students (Hurtado, 1992).

Differences by ethnic background were also found in the search methods that were utilized by the students. Puerto Rican students are less likely to report that College Nights are beneficial and are more likely to report that their counselors provided a list of colleges to explore than Chicano and Latin/Central American students. One other result revealed that Hispanic students are more likely to rely on their own resources, or college recruitment activities, to learn about colleges and universities that match their interests.

Overall, Latin/Central American students are likely to have larger college choice sets and they are more likely to attend expensive and private colleges than Chicanos and Puerto Ricans (Hurtado, 1992).

Hispanic students have cultural characteristics that influence the decisions they make in life. One such decision that may be influenced by cultural characteristics is college

choice. The present study was designed to examine factors that influence college choice, therefore it is necessary to examine that body of literature.

## Factors in College Choice

To select a college, students consider a number of factors including tuition costs, room and board expenses, commuting issues, financial aid opportunities, and lost earnings (Paulsen, 1990). Some student populations are affected more by certain factors than others.

## Majority Students

Research has revealed that the college choice behavior of majority students is different from that of other student groups. Solmon and Wingard (1991) examined the choices that students, both majority and minority, made about which college to attend. One of the differences discovered in the study was that majority students are more likely to leave their state of residence to attend college (Solmon & Wingard, 1991).

Majority students were also found to attend elite private colleges and universities in greater numbers than minority students. Unlike majority students, only 1.2% of the minority college going population attends the most elite schools (Solmon & Wingard, 1991).

Martin and Dixon (1991) examined the factors influencing students' college choice. The College Choice Influence Scale was administered to 188 students at a major southwestern university. Over 90% of the participants were White students. The results revealed that academic program, social climate, cost and location, and preferences of others are the four basic influences on college choice. The researchers also suggested that

recruiters pay close attention to the socio-economic status of prospective students (Martin & Dixon, 1991).

A related study explored the college choice of students admitted to college in 1990. A phone survey was conducted with 566 freshmen admitted to a large public university in the southwest. The sample included responses from Anglo, Black, Hispanic, and other student groups (Smith & Matthews, 1991). Overall, the top factors students consider when deciding which college to attend are: the prospect of getting a job after college, the opportunity to pursue an advanced degree, academic reputation, and reasonable costs. The results also indicated that there are some differences between majority and minority students. Anglo students tend to rate traditions and activities as important. Anglo students also consider publications and letters to be important. Finally, Anglo students consider the advice of teachers and counselors to be less important than do minority students (Smith & Matthews, 1991).

A study on counselor impact on college choice revealed similar results (Johnson, Stewart, & Eberly, 1991). The sample consisted of 3,708 freshmen. The participants completed a survey during freshmen orientation in the summer of 1985. Results revealed that over 90% of the students rate academic reputation and quality of available programs as being the most important factors in deciding where to go to college. Cost was considered an important factor by 80% of the students. Financial aid was reported as an important factor by 56.6% of the participants. On the other hand, the preferences of friends and family and the athletic program were rated as the least important factors (Johnson, Stewart, & Eberly, 1991).

## Minority Students

The literature reveals that minority students face different concerns than majority students when selecting a college. For example, economic considerations play a significant role for minority students in the selection of a college. The desire among minority students to attend college decreases as the cost of higher education increases and the availability of financial aid decreases. Some minority students prefer to work rather than go to school because of the debt that they will accrue if they attend college (Solmon & Wingard, 1991).

Another factor related to economic ability to attend college is family obligation. Many minority students may forego the opportunity to attend college because of obligations they have to their families. These students cannot afford to give up their income because their families are dependent on the money the students earn (Pounds, 1987).

A study on the recruitment of African American undergraduates revealed other factors that influence minority students' college choice (Sevier, 1993). A survey was completed by 1,127 college bound African American high school juniors. The results revealed that the four college choice items of greatest importance to African American students are: reputation of the college, availability of a specific major, total cost of attending, and availability of financial aid. On the other hand, African American students are less interested in information relating to: size of the library, family ties to college, religious activities, and study abroad programs. Results also revealed that African American high school students are more likely than their Caucasian counterparts to seek the advice of a priest, pastor, or minister and/or the advice of a high school guidance counselor or coach when considering college options. African American students also seek

information from current college students, college admissions representatives, and faculty (Sevier, 1993).

The high school counselor is the most frequently used source of information about college for Black students. Additionally, Black students are less likely than White students to seek information about college from their family. One other difference is that Black students are more concerned with costs, academic reputation, and distance from home than are White students (Johnson, Stewart, & Eberly, 1991).

A study by Stewart and Post (1990) examined the factors that influenced minority students' decisions to attend a large Midwestern university. A questionnaire consisting of both open- and closed-ended questions was administered to 332 minority students. The results revealed that Black students are more likely to attend because the university is close to home and for financial reasons, while students from other minority groups are more likely to attend because of the academic reputation of the university. Black students also differed from other minority students because they found racial issues to be the most negative aspect of the university (Stewart & Post, 1990).

In general, then, it would seem that there are differences by race in the factors that students consider when selecting a college. But the present study was also designed to examine differences by generational status (first generation versus non-first generation). So, it was important to examine that body of literature as well.

## Generational Factors in College Choice

First and second generation college students are influenced by different factors when making a college choice. Studies on generational status have examined the

knowledge different types of students have about college and how culture influences different students by generational type.

First generation college students are often at a disadvantage when selecting a college because they have a limited understanding of the college experience. For example, first generation students may have little knowledge about living in a residence hall. They may not know what a resident assistant is and what types of policies exist in a residence hall. Their limited knowledge is due in part to the fact that the parents of first generation students do not have information about college to pass on to their children. The first generation student's lack of knowledge makes college choice more difficult (York-Anderson & Bowman, 1991).

A study on the college knowledge of first generation and second generation college students revealed differences between the two. There were 58 first generation college students and 142 second generation college students included in the study. The participants were asked to complete a questionnaire about college knowledge, perceived family support, and reasons to attend college (York-Anderson & Bowman, 1991).

The results revealed that second generation college students perceive that they receive more support from their families for college attendance than do first generation students. College students who believe they receive more family support have higher college knowledge scores than students who believe they receive less support. The researchers suggested that universities implement orientation programs aimed directly at the parents of incoming first generation college students to help them understand the new environment (York-Anderson & Bowman, 1991).

Another study examined personality differences between first generation and non-first generation college students (McGregor, Mayleban, Buzzanga, Davis, & Becker, 1991). Three personality inventories were administered to 211 first generation college students and 235 students whose parents had attended college. The results revealed that students whose parents had both attended college have the highest levels of self-esteem. These students also score higher on social acceptance and humor scales. On the other hand, students whose parents had never attended college perceive themselves to be less creative. First generation students also perceive that adapting to the stresses of their environment is more difficult, but they do not perceive themselves as being less capable.

Richardson and Skinner (1992) studied the characteristics of first generation minority college students. Data were obtained through 107 in-depth interviews with graduates of 10 public universities. Results revealed that first generation college students feel they are not prepared academically for college. They also report feeling disoriented once they arrive at college because they have no understanding of what college will be like. Many first generation students do not participate in the traditional student role, which consists of participation in extracurricular and academic activities. This failure to participate is due in large part to their limited understanding of what college is like. Many first generation students also have multiple responsibilities and therefore they are more likely to attend college part time, to transfer, and to stop attending. The participants also discussed incidents where faculty revealed the low expectations they had for minority students.

School counselors also play a role in first generation students' college plans. Many families may not be enthusiastic about their child's desire to attend college. This lack of

enthusiasm may be due to parents' concerns that their children may not return to the home community and that the child may lose touch with his or her culture if they go to college (Fallon, 1997).

One other factor influencing first generation students is limited family income and a lack of knowledge about financial aid. Some families are dependent on the student's income and are therefore hesitant to send their child to college. Many first generation students are also fearful of accepting loans and accruing a debt, therefore limiting their interest in attending college (Fallon, 1997).

A final group of work on college choice and generational differences suggests ways in which high school counselors can encourage students to enroll in college. To improve participation rates in higher education among first generation students, high school counselors must be aware of the needs of first generation students and their families. Counselors should motivate, educate, support, and believe in the students. It is important that counselors make sure that students obtain proper educational training to succeed in college (Fallon, 1997).

It would appear that race and generational status influence college choice. But the present study was also designed to examine gender differences. Therefore, it was necessary to review that body of literature as well.

# Gender Differences in College Choice

College choice is influenced by many factors including gender. Gender differences may contribute to the factors students consider to be most important when selecting a college.

A study on the college choice process examined the differences among various student groups. One such group is women. Men and women start gathering information about colleges around the same time, but women tend to complete the process earlier. Women also start the college application process earlier. Women who apply to selective colleges tend to apply more often for early decision than do men (Litten, 1982).

A study on counselor impact on college choice also revealed gender differences. The sample for the study consisted of 2,081 women and 1,627 men. The participants completed a questionnaire during freshmen orientation in the summer of 1985. The results revealed that men rate extracurricular activities, athletic programs, and friends' preferences as more important in choosing a college than do women. Women rate academic reputation, quality of available programs, friendliness of the school, size, campus beauty, and distance as more important than do men. There were no differences found between men and women with respect to issues like costs, financial aid, prestige, familiarity with the school, and family preference. Both men and women consider reputation of the school, cost, and financial aid to be the most important factors to consider when choosing a college (Johnson, Stewart, & Eberly, 1991).

Valadez (1998) examined race, class, and gender differences when applying to college. The sample consisted of 10,080 secondary school students who expressed aspirations for completing a college degree. The results revealed that males are affected by socioeconomic status more then females when applying to college, and females have more educational and parental resources to draw on than males. The females are also more effective in utilizing those resources to aid them with their persistence to continue their education (Valadez, 1998).

Overall, it would seem that there are differences by race, generational status, and gender in the factors that students consider when applying to college. The present study was designed around a particular model of college choice. A description of that model provides a context for better understanding the overall study.

## College Choice Model

The present study was designed around a model of the college choice process developed by Chapman (1981). Chapman's (1981) model is longitudinal and takes into account both background and current characteristics of the student, the student's family, and the characteristics of the college. The model is limited to describing the influences affecting traditional age prospective students. The model describes two sets of influences: student characteristics and external influences (Chapman, 1981).

### **Student Characteristics**

The student characteristics in the model include socioeconomic status, aptitude, level of educational aspiration/expectation, and high school performance. The first characteristic, socioeconomic status, has a major impact on college choice. Students of different socioeconomic statuses enter higher education at different rates and they attend different types of colleges and universities. Family income, an aspect of socioeconomic status, interacts with institutional cost and financial aid to limit what students believe are their options. Upper income students tend to prefer private universities, middle income students prefer state universities, and lower income students often prefer community colleges or state colleges. Socioeconomic status serves as a backdrop that influences attitudes and behaviors that are related to college choice (Chapman, 1981).

The second student characteristic is aptitude. Aptitude influences high school achievement and performance on the aptitude tests that are associated with college entrance examinations. Colleges often publish the test scores and class rank of their entering class, thus encouraging students to self-select institutions with enrolled students who exhibit similar aptitudes as themselves (Chapman, 1981).

Level of educational aspiration/expectation is another student characteristic.

Expectations are what people perceive they will be doing or will have accomplished at some future date. On the other hand, aspirations are wishes or desires expressing an individual's hopes about the future. Educational aspirations and expectations are related to high school performance and college choice (Chapman, 1981).

The last student characteristic, high school performance, has a direct impact on college choice. Most colleges accept or reject students based on their high school performance. Students with good academic records also receive more benefits. These students receive more encouragement to go on to college from teachers, family, and friends. High performing students are also more likely to receive college advising from a guidance counselor and more likely to receive college scholarships (Chapman, 1981).

### **External Influences**

The second set of characteristics in the Chapman (1981) model are external influences. External influences include significant persons, fixed college characteristics, and college efforts to communicate with students. The first external influence, significant persons, includes friends and family. Students are strongly influenced by the comments and advice of friends and family when selecting a college. Comments from significant persons shape the student's expectations of what a particular college is like. Friends and family

may also offer advice about where a student should go to college. Students may also choose to go to school where their friends go (Chapman, 1981).

Fixed college characteristics include location, costs, campus environment, and the availability of desired programs. All of these characteristics are relatively stable. Changes occur slowly, over long periods of time (Chapman, 1981).

The final external characteristic is college efforts to communicate with students. This characteristic includes college marketing strategies such as brochures, personal contact, and high school visits. High school visits by college admissions representatives and campus visits by prospective students are the most effective recruiting activities. Students who expect to go on to college are more likely to seek out college information from such sources (Chapman, 1981).

### Conclusion

Results from previous studies on college choice have revealed that there are many factors such as cost, location, and school reputation that influence a student's college choice. The literature also suggest that differences exist among students by class, race, gender, and generational status when selecting a college. However, research on college choice has not revealed what factors influence the college choice of Hispanic students. The studies also do not discuss the impact of generational status, gender, or ethnic background on Hispanic student college choice. The current study was designed to address this gap in the existing body of literature by studying the college choice factors of Hispanic students and analyzing the results by generational status, gender, and ethnic background.

#### CHAPTER 3

### **METHODOLOGY**

The purpose of this study was to examine the factors that influence Hispanic students' college choice process. For purposes of the study, the college choice process consisted of two phases: the college search phase and the college selection phase. The college search phase consisted of the factors Hispanic students considered when applying to colleges. The college selection phase consisted of the factors Hispanic students considered when deciding which of the colleges to which they were admitted they wanted to attend.

Data were collected by administering a quantitative survey to Hispanic students about the factors they consider when conducting their college search and selection processes. The study was designed to gain a better understanding of how Hispanic students make decisions about higher education and to examine differences among Hispanic students in terms of gender, generational status, and ethnic background. Specifically, the study was designed to explore the following research questions:

- 1. Are there significant differences in the internal factors that influence Hispanic students' search process by gender, generational status, or ethnic background?
- 2. Are there significant differences in the internal factors that influence Hispanic students' selection process by gender, generational status, or ethnic background?
- 3. Are there significant differences in the external factors that influence Hispanic students' search process by gender, generational status, or ethnic background?

4. Are there significant differences in the external factors that influence Hispanic students' selection process by gender, generational status, or ethnic background?

# Sample Selection

## **Population**

Data were collected from a sample of participants at one large, public, research university located in the southeast region of the U.S. The institution at which the study was conducted enrolls approximately 19,000 undergraduate students. In the 1998/99 academic year, 383 students identified themselves as Hispanic. The population for the present study included all students at the selected institution who identified themselves as Hispanic.

## Sample Selection

The Office of Institutional Research at the selected institution was asked to provide the researcher a list of all undergraduate students at the institution who identified themselves as Hispanic. Participants were of all class levels (freshmen through seniors). The population included male, female, first generation, and non-first generation college students. It was assumed that the students from different ethnic backgrounds (e.g. Puerto Rican, Mexican, Central American, South American) were represented although the institution did not record data about ethnic background.

In the 1998/99 academic year, 115 freshmen identified themselves as Hispanic. The sophomore class consisted of 103 Hispanic students. In the junior class, 81 Hispanic students were enrolled. The senior class of the 1998/99 academic year included 82 Hispanic students. In two cases, no class rank was reported.

The total number of undergraduate Hispanic students enrolled at the selected institution for the 1998/99 academic year was 383. The total number of male Hispanic students enrolled in 1998/99 was 228 and the female total was 155.

There was no way to identify generational status prior to the administration of the instrument. The Office of Institutional Research at the selected institution does not collect data on the generational status of its enrolled students. The number of students who are either first generation or non-first generation students could only be determined after the administration of the instrument.

The ethnic background of the participants could not be identified before the administration of the instrument either. Again, this sort of data is not collected by the Office of Institutional Research so the researcher designed the instrument administered in the study to collect this data. The researcher asked the participants to select one of four ethnic backgrounds: Mexican, Puerto Rican, Central American, and South American. The instrument also included an option for respondents to list other ethnic backgrounds if appropriate.

In order to maximize the sample size, all Hispanic students were asked to participate in the present study. Characteristics of the final sample were dependent on the number of students who responded.

#### Instrumentation

The present study utilized the model of the college choice process developed by Chapman (1981). The model was adapted for the present study in two ways. First, the researcher redefined the terms internal factors and external factors described by Chapman. In the present study, internal factors consisted of those factors over which the student had

some or all control. Some examples of internal factors were availability of financial aid, diversity of student body, and expectations of friends and family. External factors were defined as factors over which the institution had primary control. For example, size of the college, majors offered, tuition, and location were considered external factors.

The second adaptation to the Chapman (1981) model related to the phases of the college choice process. Chapman did not distinguish between the college search and college selection processes while other scholars (Litten, 1982; Sevier, 1993) did recognize a distinction between the two processes. Therefore, the researcher decided to examine both the college search and selection processes in the present study.

In order to elicit data about the factors that influence college choice, an instrument was developed. The instrument was developed in two stages. First, focus groups with Hispanic students were conducted to elicit information about the factors they considered in their college choice process. Then, the results of the focus groups were coupled with what the literature suggested as factors related to the college choice process for minority students. The focus group results and literature were then used to develop a quantitative instrument about the factors that influence the college choice process of Hispanic students.

### Focus Groups

Two focus groups were conducted. One included five Hispanic students and the other consisted of seven Hispanic students. The groups included both male and female and both first and non-first generation Hispanic college students.

To begin the focus group discussions, the researcher provided the participants with an overview of the study. The researcher explained that the results from the focus groups would be used to create the instrument utilized in the study.

The focus group participants were then asked to respond to four questions and write their answers on note cards. The note cards were color coded for each question. First, the participants were asked to list the internal factors that influenced their college search process. Second, participants listed the internal factors that influenced their college selection process. Third, participants listed the external factors that influenced their college search process. Finally, participants listed the external factors that influenced their college selection process. Once the participants were done listing all the factors, the researcher led the participants in a discussion about their responses.

The data from the focus groups were analyzed for recurrent themes. The cards for each question were assigned to groups based on the responses given by the participants.

The cards were assigned to either the internal factors or the external factors group.

The researcher first looked at the factors that influenced the college search process. The participants listed eight internal factors that influenced their college search process. Some examples included: expectations of family and friends, religious beliefs, and distance from home. The participants also listed eight recurrent themes for the external factors that influenced their college search process. Examples of the factors included: location, national reputation, and size.

In terms of the college selection process, participants identified eight internal factors. Some of the factors identified were distance from home, financial aid, and campus climate. The participants also listed eight recurrent themes for the external factors that influenced their college selection process. Some examples of the factors listed by the participants were national reputation, majors offered, and tuition.

There were two interesting trends in the results of the focus group discussions.

First, several of the factors that were listed by the participants as influencing their college search process were also listed as influencing their college selection process. Examples of these factors included reputation of school, appearance of campus, size, and location.

Second, the participants listed some items as both internal and external factors. Some of these factors included national reputation, tuition, location, and extracurricular activities.

Given these trends, the researcher decided to take two steps in designing the instrument. First, the researcher decided to ask respondents in the larger study to rate the degree to which all factors mentioned by the focus group participants influenced both their college search and selection processes. Therefore, the factors identified by the focus groups were listed in both the college search and college selection sections of the instrument designed for the study.

The second step the researcher took was to assign the factors to either the internal or external groups based on who had control over the factors rather than using the designations given to the factors by the focus group participants. That is, all factors over which the individual had control over were assigned as internal factors (e.g. religious beliefs, distance from home). Those factors over which the institution had control over were assigned to the external group (e.g. majors offered, tuition). This enabled the researcher to maintain clear distinctions between internal and external factors.

In total, the focus group participants identified 16 factors that were included as items on the instrument developed for purposes of the present study. The next step in developing the instrument was to compare the factors identified by the focus groups and the factors identified in the literature.

### Literature

The literature on college choice was reviewed for additional factors that influence the college choice process. Many of the factors listed by the participants in the focus groups were also included in the literature. However, there were four factors that were not mentioned by the participants, but that the literature described as important.

The first factor is financial obligations to family. Pounds' (1987) research revealed that many minority students cannot afford to give up their incomes because their families are dependent on the money the students earn. Financial obligations to family was assigned to the internal factors group since the individual has control over this factor.

The second factor identified in the literature but not by the focus group was college effort to communicate with student. Chapman (1981) describes this factor as including college marketing strategies such as brochures, personal contact, and high school visits. This factor was assigned to the external factors group since the institution has primary control over its efforts to communicate with students.

Third, the literature identified the prospect of getting a job as another factor that influences the college choice process. A study revealed that the prospect of getting a job was a top factor students considered when deciding which college to attend (Smith & Matthews, 1991). This factor was assigned to the internal factors group because it is based on the individual student's personal opinion.

Finally, the literature identified the opportunity to pursue an advanced degree as a factor that also influences the college choice process. A study revealed that the opportunity to pursue an advanced degree was also a top factor students considered when

deciding which college to attend (Smith & Matthews, 1991). This factor was assigned to the internal factors group because it is also an individual rather than an institutional issue.

All four factors that were identified by the literature were included in the instrument designed for the study. The researcher decided to ask respondents to rate the degree to which all factors identified by the literature influenced both their college search and college selection processes. Therefore, the factors identified in the literature were listed in both the college search and college selection sections of the instrument. The results from the focus groups and the literature were used to develop a survey about the college choice of Hispanic students.

## The College Choice Survey

Data for the study were collected by administering the College Choice Survey (CCS). The CCS was designed to measure the factors that influence the college search and selection processes of Hispanic students. The CCS is quantitative and consists of items that ask participants to respond on a Likert-type scale.

The CCS consists of three sections: items related to the college search process; items related to the college selection process; and demographic information. In the college search and selection sections, there are items that reflect both internal and external factors.

The college search section started with the stem of a sentence: "When considering which colleges to apply to, I considered:". The stem was followed by 20 items. The first 10 items were external factors like "size of college/university", "majors offered", and "tuition." The remaining 10 items were internal factors and included "distance from home", "religious beliefs", and "expectations of family and friends." For each item, participants were asked to rate on a four-point scale the extent to which they agreed that

they had considered that factor when considering where to apply to college. Ratings extended from "strongly agree" (4) to "strongly disagree" (1). Participants could also select a "no opinion" option for any item.

The college selection section started with the stem of a sentence: "When deciding which college to attend, I considered:". The stem was followed by 20 items. The first 10 items were external factors like "size of college/university", "majors offered", and "tuition." The remaining 10 items were internal factors and included "distance from home", "religious beliefs", and "expectations of family and friends." For each item, participants were asked to rate on a four-point scale the extent to which they agreed that they had considered that factor when deciding which college to attend. Ratings extended from "strongly agree" (4) to "strongly disagree" (1). Participants could also select a "no opinion" option for any item.

The remaining two items on the instrument asked participants to rate the degree to which they used 10 sources of support and information. Examples of the sources of support include parents, high school guidance counselor, college admissions advisors, college and university mailings, and friends.

In the first item, respondents were asked to rate the degree to which they used these sources during the college search process. The first item began with statement: "Please rate the extent to which you relied on the information/support form the following when you were considering which college to apply to." For each source of support, participants were asked to rate on a five-point scale the extent to which they relied on the listed source of support. Ratings extended from "did not rely on" (1) to "relied on heavily" (4). A response of five reflected "no opinion."

In the second item, participants were asked to rate the extent to which they used these sources in the college selection process. The second item began with statement: "Please rate the extent to which you relied on the information/support form the following when you were considering which college to attend." For each source of support, participants were asked to rate on a five-point scale the extent to which they relied on the listed source of support. Ratings extended from "did not rely on" (1) to "relied on heavily" (4). A response of five reflected "no opinion."

The final section of the CCS consisted of questions about demographic characteristics. The four items asked participants about their gender, year in school, ethnic background, and generational status. A copy of the CCS is provided in Appendix A of this report.

# Validity and Reliability

Validity in quantitative studies refers to the appropriateness, meaningfulness, and usefulness of specific inferences made from test scores (Gall, Borg, & Gall, 1996). A valid questionnaire accurately measures what it was designed to measure, so that the inferences made from the results are accurate (Suskie, 1996).

In the present study, validity was enhanced by taking three steps. First, the instrument was developed by utilizing the responses from the focus groups and the literature on college choice. All the factors included in the survey came from one of these two sources. Validity was enhanced through this process because the items came from both prior research and from the experiences of students who have gone through the college choice process.

Second, validity was enhanced by having a panel of three experts on the campus where the study was conducted review the instrument. The experts included an Associate Provost who tracked minority enrollment on the campus, an Associate Provost who had oversight for retention and academic support and an Associate Professor of Higher Education and Student Affairs. Validity was enhanced through this process because the experts provided feedback on the instrument. Review by a panel of experts is a method frequently used to enhance validity (Gall, Borg, and Gall, 1996).

Finally, 10 currently enrolled college students were asked to complete the instrument and offer comments about the clarity of the items and the instructions on the CCS. The comments offered by the students were used to revise the instrument, hence enhancing the validity of the CCS.

Reliability in quantitative studies refers to the extent to which an instrument accurately measures a phenomenon over time and populations (Gall, Borg, & Gall, 1996). Since the CCS was developed for purposes of this study only, no attempts to test reliability were made.

#### **Data Collection Procedures**

Initial preparation for the study included obtaining approval to conduct the study from the Institutional Review Board for Research on Human Subjects at the institution where research was conducted. Once approval was obtained, data collection commenced.

All participants were mailed a packet that included a cover letter, a self addressed and stamped envelope, a copy of the CCS, and an informed consent form that included information about the incentive for participating in the study. Packets were mailed to the participants on January 27, 1999.

A cover letter with information about the researcher and the purpose of the research was sent to the participants. The letter described the incentive for participating in the study, participant requirements and responsibilities, a time frame for the study, and other details about the research project. A copy of the cover letter can be found in Appendix B. The letters invited the students to participate and provided the necessary information so that the participants could contact the researcher if needed. A stamped and addressed return envelope was provided so participants could return the instrument without incurring any expense.

The deadline to return the completed survey was February 12, 1999. Upon completing the instrument, participants mailed their responses, along with the signed informed consent form, to the researcher.

A reminder postcard was sent to all participants a week after the instrument was mailed. The postcard reminded participants to send in the instrument by the deadline. The postcard also reminded the participants about the incentive.

The informed consent form consisted of several components. The title of the project and the name of the researcher were included in the form. Participants were told about the purpose of the research, the data collection procedures, the risks and benefits of the study. They were assured that the confidentiality of their responses would be respected and that the results would be reported only in aggregate form.

The informed consent form served as an entry form for the drawing of the incentive. The bottom of the last page of the informed consent form was the entry form for the drawing. The entry form asked for the participant's name, phone number, and

email address, so that the researcher could contact the winner of the incentive. A copy of the informed consent form can be found in Appendix C of this report.

The incentive for the participants was entry into a drawing for a \$100 prize. One participant was selected at random to receive the \$100 prize. The participants were entered into the drawing if they returned a completed survey along with the signed informed consent/entry form by February 12, 1999.

In order to ensure confidentiality, the researcher separated the informed consent forms from the completed instruments upon receiving them. This ensured that all respondents were entered into the drawing for the incentive while simultaneously ensuring the confidentiality of the responses participants provided on the CCS.

Once the surveys were returned, the researcher entered the participants in the drawing for the prize. One participant was selected at random to receive the prize money. The participant selected to receive the prize was contacted on February 26, 1999 and the prize was awarded.

#### Data Analysis Procedures

Once data were collected, the researcher began to analyze those data. Data were analyzed using the Statistical Package for Social Sciences (SPSS) (Kellough, 1985).

First, the mean scores for each item of the instrument were calculated for all participants. This allowed the researcher to determine the range of mean scores among items and look for any anomalies in the data.

Then, items were sorted into the four scales: internal factors related to the college search process (items 1-10), external factors related to the college search process (items 11-20), internal factors related to the college selection process (items 21-30), external

factor related to the college selection process (items 31-40). The mean scores for each scale were then calculated for nine groups: male, female, first generation, non-first generation, Mexican, Puerto Rican, Central American, South American, and Other. This allowed the researcher to examine the mean scores for each of the four scales for the groups considered in the study and to conduct the next stage of analysis.

The next stage of analysis consisted of a series of three-way analyses of variance (ANOVAs) on each of the four scales. The dependent variables were the mean scores on each of the four scales (e.g. internal search factors, internal selection factors). The independent variables were gender (male v. female), generational status (first generation v. non-first generation), and ethnic background (Mexican v. Puerto Rican v. Central American v. South American v. Other). All ANOVAs were tested at the p<.05 level. This enabled the researcher to examine significant differences in the mean scores on each scale for three main effects (gender, generational status, and ethnic background) and all interaction effects (gender and generational status; gender and ethnic background; generational status and ethnic background; and gender, generational status, and ethnic background).

Finally, the researcher analyzed the results from the last two items on the CCS, which asked participants to rate the degree to which they used 10 different sources of support during the college search and selection processes. First, the mean scores for each source of support utilized in the college search and selection processes were calculated for nine groups: male, female, first generation, non-first generation, Mexican, Puerto Rican, Central American, South American, and Other. This allowed the researcher to examine the

mean scores for each source of support for the groups considered in the study and to conduct the next stage of analysis.

Next, a series of ANOVAs were conducted for main effects. The independent variables were gender (male v. female), generational status (first generation v. non-first generation), and ethnic background (Mexican v. Puerto Rican v. Central American v. South American v. Other). All ANOVAs were tested at the p<.05 level. This enabled the researcher to examine significant differences for three main effects (gender, generational status, and ethnic background).

In conclusion, this study was designed to investigate the factors that influence the college choice of Hispanic students. The study also investigated differences by gender, generational status, and ethnic background. The methodology described in this chapter was deemed sufficient to elicit data relevant to the research questions posed in the study.

#### CHAPTER FOUR

#### **RESULTS**

The purpose of this chapter is to report the findings of the study. The chapter begins by describing minor changes that occurred in the data collection procedure. Second, a description of the sample is provided. Finally, the data analysis, which is organized around the four research questions posed in the study, is described.

### Changes in Data Collection Procedure

Due to an early approval of the research proposal, the researcher made some minor changes to the data collection dates. The researcher sent out packets of information to participants on January 22, 1999 that contained a cover letter, a self addressed and stamped envelope, a copy of the CCS, and an informed consent form that included information about the incentive for participating in the study. The deadline to return the completed survey was also changed to February 8, 1999. Finally, the participant selected to receive the incentive for participation was contacted on February 22, 1999 and the prize was awarded.

#### Characteristics of the Sample

A total of 383 surveys were mailed and 144 surveys were completed and returned by respondents. This reflected a response rate of 38%. There were 66 (46%) male respondents and 78 (54%) female respondents in the sample. Thirty-six (25%) of respondents were first generation students and 108 (75%) were non-first generation students. The number of students from different ethnic backgrounds ranged from 20 (14%) for Mexican to 44 (31%) for South American. Table 1 summarizes the characteristics of the respondents by gender, generational status, and ethnic background.

Table 1
Characteristics of the Sample (N=144)

Characteristic	N	%	
Gender			
Male	66	46	
Female	78	54	
Subtotal	144	100	
Generational Status			
First Generation	36	25	
Non-First Generation	108	75	
Subtotal	144	100	
Ethnic Background			
Mexican	20	14	
Puerto Rican	28	19	
Central American		26	18
South American	44	31	
Other	26	18	
Subtotal	144	100	

#### Raw Data

The mean scores for all the factors listed in the subscales ranged from a high of 2.32 to a low of 1.33. The highest mean was for religious beliefs and the lowest mean was for tuition. Therefore, participants rated tuition as influencing them the most and religious beliefs as influencing them the least.

The frequencies for all the factors listed in the subscales also revealed differences in the factors that influenced the participants. The five factors that influenced participants the most during both the college search and selection processes were majors offered, national reputation of college/university, location of college/university technology available on campus, and tuition. The factor that influenced participants the least during both the college search and selection processes was religious beliefs.

The mean scores for the sources of support during the college search and selection processes ranged from a high of 1.19 to a low of 1.90. The highest mean was for parents and the lowest mean was for college admissions advisors.

The respondents also reported that they relied on different sources of support during the two phases of the college choice process. During the college search process, participants relied most on family (mean score = 2.95) and friends (2.74). Participants relied least on college admissions advisors (1.96) and community members (1.90) during the college search process.

During the college selection process participants relied the most on parents(mean score = 3.19). Participants relied on community members (1.99), high school teachers (1.97), and college admissions advisors (1.90) the least during the college selection process.

# Data Analysis

A total of 65 ANOVAs were run on the data elicited from participants. Five ANOVAs were run on the subscales, which included total College Choice Survey scores, Internal Search scores, Internal Selection scores, External Search scores, and External Selection scores. The independent variables were gender, generational status, and ethnic background. A total of three significant differences were found among these five ANOVAs.

The remaining 60 ANOVAs examined differences reported by respondents on the last two items in the survey. These items asked participants to rate the degree to which they used sources of support for both the search and selection processes. The ANOVAs were run for differences by main effect only (i.e. gender, generational status, and ethnic background). The first 10 items asked respondents to rate sources of support they utilized during the college search process. ANOVAs were run on each item. Results revealed a total of three significant differences on the sources of support participants used during the search process.

The remaining 10 items asked participants to rate sources of support they utilized during the college selection process. ANOVAs were run on each item. A total of four significant differences were identified among the sources of support respondents used during the selection process.

## ANOVA on Total College Choice Survey Scores

The mean score for responses to the first 40 items on the CCS for all subgroups was calculated. An ANOVA was calculated on the total scores for both main and interactive effects. Results revealed one significant difference by gender. The mean CCS

score was significantly higher for females than for males. Table 2 summarizes the results of the total scores.

### ANOVAs on Subscales

The mean scores for the 10 items that comprised the Internal Search scale were calculated for all four subgroups, including gender, generational status, and ethnic background. An ANOVA was conducted on the Internal Search scale for both main (gender, generational status, ethnic background) and interaction effects. Results revealed no significant differences. Table 3 summarizes the results of the ANOVA on the Internal Search scale.

Next, the mean scores for the 10 items that comprised the Internal Selection scale were calculated for all subgroups. An ANOVA was calculated to compare mean scores by both main and interaction effects. Results revealed no significant differences. Table 4 summarizes the results of the ANOVA on the Internal Selection scale.

Then, the mean scores for the 10 items that comprised the External Search scale were calculated for all subgroups. An ANOVA was conducted on those main scores to identify differences due to both main and interaction effects. Results revealed one significant difference based on gender. Females scored significantly higher than males on the scale. Table 5 summarizes the results of the ANOVA related to the External Search scale.

Finally, the mean scores for the 10 items that comprised the External Selection scale were calculated for all subgroups. An ANOVA was calculated on those mean scores to identify differences due to both main and interaction effects. Results revealed

Table 2

ANOVAs on Total College Choice Survey Scores by Gender, Generational Status, and Ethnic Background

Variable	N	M	df	F	p
Gender	144		1	5.86	.017*
Male	66	1.85			
Female	78	1.63			
Generational Status	144		1	.997	.320
First Generation	36	1.70			
Non-First Generation	108	1.76			
Ethnic Background	144		4	.303	.875
Mexican	20	1.82			
Puerto Rican	28	1.71			
Central American		26	1.63		
South American	44	1.77			
Other	26	1.82			

<sup>\*</sup> = significant at the .05 level

Table 3

ANOVAs on Internal Search Scale by Gender, Generational Status, and Ethnic Background

Variable	N	M	df	F	p
Gender	144		1	3.34	.070
Male	66	1.93			
Female	78	1.69			
Generational Status	144		1	.275	.601
First Generation	36	1.76			
Non-First Generation	108	1.84			
Ethnic Background	144		4	.690	.600
Mexican	20	1.96			
Puerto Rican	28	1.81			
Central American		26	1.72		
South American	44	1.79			
Other	26	1.89			

<sup>\* =</sup> significant at the .05 level

Table 4

ANOVAs on Internal Selection Scale by Gender, Generational Status, and Ethnic Background

Variable	N	M	df	F	p
Gender	144		1	2.416	.123
Male	66	1.90			
Female	78	1.67			
Generational Status	144		1	2.435	.121
First Generation	36	1.70			
Non-First Generation	108	1.83			
Ethnic Background	144		4	.374	.827
Mexican	20	1.90			
Puerto Rican	28	1.68			
Central American		26	1.69		
South American	44	1.84			
Other	26	1.88			

<sup>\* =</sup> significant at the .05 level

Table 5

ANOVAs on External Search Scale by Gender, Generational Status, and Ethnic Background

Variable	N	M	df	F	p
Gender	144		1	6.164	.014*
Male	66	1.76			
Female	78	1.62			
Generational Status	144		1	.318	.574
First Generation	36	1.67			
Non-First Generation	108	1.70			
Ethnic Background	144		4	.133	.970
Mexican	20	1.74			
Puerto Rican	28	1.70			
Central American		26	1.60		
South American	44	1.69			
Other	26	1.74			

<sup>\* =</sup> significant at the .05 level

one significant difference by gender. Females scored significantly higher than males on the scale. Table 6 summarizes the results of the ANOVA on the External Search scale.

## ANOVAs on Sources of Support and Information During the Search Process

Item 41 on the College Choice Survey asked participants to rate the degree to which they used 10 sources of support during their college search process. The participants rated their use of the sources on a scale ranging from one (did not rely on) to four (relied on heavily). A response of five reflected "no opinion." A series of three ANOVAs were conducted to test for significant differences by main effects (gender, generational status, and ethnic background).

The first ANOVA was conducted to explore differences by gender. Those results revealed one significant difference. Females relied significantly more on parents as sources of support during the Search process than did males. Table 7 summarizes the results of the analysis by gender for sources of support used by participants during the search process.

A second series of ANOVAs were conducted to examine differences in sources of support used during the search process by generational status. The results revealed one significant difference. First generation college students relied on community members for support significantly more so than non-first generation college students. Table 8 summarizes the results of the ANOVAs on sources of support in the search process by generational status.

Table 6

ANOVAs on External Selection Scale by Gender, Generational Status, and Ethnic Background

Variable	N	M	df	F	p
Gender	144		1	8.272	.005*
Male	66	1.79			
Female	78	1.54			
Generational Status	144		1	.373	.542
First Generation	36	1.66			
Non-First Generation	108	1.68			
Ethnic Background	144		4	.774	.544
Mexican	20	1.68			
Puerto Rican	28	1.66			
Central American		26	1.52		
South American	44	1.74			
Other	26	1.75			

<sup>\* =</sup> significant at the .05 level

Table 7

ANOVAs on Sources of Support and Information During the Search Process by Gender

Variable	N	M	df	F	p
		111			
Parents	144	2.50	1	4.337	.039*
Male	78	2.79			
Female	66	3.14			
Family Members	144		1	3.532	.062
Male	78	2.26			
Female	66	2.59			
High School Guidance Counselor	144		1	1.763	.186
Male	78	2.06			
Female	66	2.29			
High School Teachers	144		1	.332	.566
Male	78	2.04	-	.552	
Female	66	2.14			
College Admissions Advisors	144		1	1.282	.259
Male	78	1.86	•	1.202	.20)
Female	66	2.08			
Community Members	144		1	.048	.827
Male	78	1.88	1	.0+0	.021
Female	66	1.92			
Friends	144		1	1.613	.206
Male	78	2.83	1	1.013	.200
Female	66	2.64			
College and University Mailings	144		1	.486	.487
Male	78	2.77			
Female	66	2.65			
Phone Calls from Colleges and Univer	sities 144		1	.477	.491
Male	78	2.21			
Female	66	2.06			
College Guide Books	144		1	.000	1.000
Male	78	2.67			
Female	66	2.67			

<sup>\* =</sup> significant at the .05 level

Table 8

ANOVAs on Sources of Support and Information During the Search Process by Generational Status

Variable	N	M	df	F	p
Parents First Generation Non-First Generation	144 36 108		1 2.83 2.99	.679	.411
Family Members First Generation Non-First Generation	144 36 108		1 2.28 2.45	.724	.396
High School Guidance Counselor First Generation Non-First Generation	144 36 108		1 2.25 2.14	.325	.570
High School Teachers First Generation Non-First Generation	144 36 108		1 2.17 2.06	.323	.571
College Admissions Advisors First Generation Non-First Generation	144 36 108		1 2.19 1.88	2.053	.154
Community Members First Generation Non-First Generation	144 36 108		1 2.25 1.79	5.109	.025*
Friends First Generation Non-First Generation	144 36 108		1 2.86 2.70	.773	.381
College and University Mailings First Generation Non-First Generation	144 36 108		1 2.81 2.69	.383	.537
Phone Calls from Colleges and Universitie First Generation Non-First Generation	es 144 36 108		1 2.17 2.13	.024	.878
College Guide Books First Generation Non-First Generation	144 36 108		1 2.83 2.61	1.097	.297

<sup>\* =</sup> significant at the .05 level

A third series of ANOVAs were conducted to look for differences in sources of support used during the search process by ethnic background. The results revealed one significant difference related to the use of college admissions advisors. Central American students reported using advisors most frequently while Mexican students reported using advisors least frequently. Table 9 summarizes the results of the ANOVAs on sources of support in the search process by ethnic background.

### ANOVAs on Sources of Support and Information During the Selection Process

The last item on the CCS asked respondents to rate the degree to which they used 10 sources of support and information during the college selection process. The participants rated their use of the sources of support on a scale ranging from one (did not rely on) to four (relied on heavily). A response of five reflected "no opinion." A series of three ANOVAs were conducted to test for differences by main effect (gender, generational status, and ethnic background).

The first series of ANOVAs investigated differences by gender. The results revealed two significant differences. The first difference related to the reliance on parents as a source of support and information. Females reported relying on parents significantly more than males. The second difference related to the reliance on family members as a source of support and information. Once again, females reported relying on family members significantly more than males. Table 10 summarizes the results of the ANOVAs on sources of support in the selection process by gender.

A second series of ANOVAs were conducted to examine differences in sources of support during the selection process by generational status. The results revealed one

Table 9

ANOVAs on Sources of Support and Information During the Search Process by Ethnic Background

Variable	N	M	df	F	p
Parents	144		4	1.346	.256
Mexican	20	2.90			
Puerto Rican	28	3.04			
Central American		26	3.31		
South American	44	2.77			
Other	26	2.85			
Family Members	144		4	1.574	.185
Mexican	20	2.05			
Puerto Rican	28	2.29			
Central American		26	2.81		
South American	44	2.41			
Other	26	2.42			
High School Guidance Counselor	144		4	1.656	.164
Mexican	20	1.90			
Puerto Rican	28	2.29			
Central American		26	2.54		
South American	44	2.00			
Other	26	2.15			
High School Teachers	144		4	2.231	.069
Mexican	20	2.00			
Puerto Rican	28	2.07			
Central American		26	2.50		
South American	44	1.80			
Other	26	2.23			
College Admissions Advisors	144		4	2.614	.038*
Mexican	20	1.40			
Puerto Rican	28	2.00			
Central American		26	2.31		
South American	44	1.80			
Other	26	2.27			
Community Members	144		4	1.578	.183
Mexican	20	1.70			
Puerto Rican	28	2.14			
Central American		26	2.19		
South American	44	1.66			
Other	26	1.92			
Friends	144		4	.707	.589
Mexican	20	2.50			
Puerto Rican	28	2.82			
Central American		26	2.88		
South American	44	2.66			
Other	26	2.85			

College and University Mailings	144		4	1.211	.309
Mexican	20	2.50			
Puerto Rican	28	2.71			
Central American		26	2.92		
South American	44	2.55			
Other	26	2.96			
Phone Calls from Colleges and Universities	144		4	2.393	.054
Mexican	20	1.85			
Puerto Rican	28	1.96			
Central American		26	2.38		
South American	44	1.90			
Other	26	2.69			
College Guide Books	144		4	.264	.901
Mexican	20	2.60			
Puerto Rican	28	2.75			
Central American		26	2.77		
South American	44	2.55			
Other	26	2.73			

<sup>\*</sup> = significant at the .05 level

Table 10

ANOVAs on Sources of Support and Information During the Selection Process by Gender

Variable	N	M	df	F	p
Parents	144		1	7.720	.006*
Male	78	2.97			
Female	66	3.44			
Family Members	144		1	9.670	.002*
Male	78	2.28			
Female	66	2.86			
High School Guidance Counselor	144		1	2.367	.126
Male	78	1.91			
Female	66	2.18			
High School Teachers	144		1	.425	.516
Male	78	1.91			
Female	66	2.03			
College Admissions Advisors	144		1	1.461	.229
Male	78	1.79			
Female	66	2.03			
Community Members	144		1	.119	.730
Male	78	2.03			
Female	66	1.95			
Friends	144		1	2.499	.116
Male	78	2.83			
Female	66	2.56			
College and University Mailings	144		1	.132	.717
Male	78	2.55			
Female	66	2.48			
Phone Calls from Colleges and Univer	sities 144		1	.001	.978
Male	78	2.12			
Female	66	2.12			
College Guide Books	144		1	.980	.324
Male	78	2.41			
Female	66	2.60			

<sup>\* =</sup> significant at the .05 level

significant difference that related to reliance on community members. First generation college students relied significantly more heavily on community members during the selection process than did non-first generation college students. Table 11 summarizes the results of the ANOVAs on sources of support in the selection process by generational status.

The final series of ANOVAs were conducted to explore differences in the sources of support used during the selection process by ethnic background. The results revealed one significant difference. The difference related to reliance on calls from colleges and universities. Respondents who identified their ethnic background as "other" reported the highest degree of reliance on such calls. Both the Mexican and South American students reported the lowest levels of reliance on these calls. Table 12 summarizes the results of the ANOVAs on sources of support during the selection process by ethnic background.

Overall, the study revealed significant differences by gender, generational status, and ethnic background for some of the factors that influence the college choice process. These results and their implications for future practice and research are discussed in the final chapter of this report.

Table 11

ANOVAs on Sources of Support and Information During the Selection Process by Generational Status

Variable	N	M	df	F	p
Parents First Generation Non-First Generation	144 36 108	3.03 3.24	1	1.169	.297
Family Members First Generation Non-First Generation	144 36 108	2.47 2.57	1	.210	.647
High School Guidance Counselor First Generation Non-First Generation	144 36 108	2.11 2.01	1	.248	.619
High School Teachers First Generation Non-First Generation	144 36 108	1.97 1.96	1	.002	.965
College Admissions Advisors First Generation Non-First Generation	144 36 108	2.17 1.81	1	2.481	.117
Community Members First Generation Non-First Generation	144 36 108	2.39 1.86	1	5.147	.025*
Friends First Generation Non-First Generation	144 36 108	2.89 2.65	1	1.460	.229
College and University Mailings First Generation	144 36	2.53	1	.002	.965
Non-First Generation  Phone Calls from Colleges and Universities First Generation Non-First Generation	108 s 144 36 108	<ul><li>2.52</li><li>2.08</li><li>2.13</li></ul>	1	.035	.851
College Guide Books First Generation Non-First Generation	144 36 108	2.56 2.48	1	.105	.746

<sup>\* =</sup> significant at the .05 level

Table 12

ANOVAs on Sources of Support and Information During the Selection Process by Ethnic Background

Variable	N	M	df	F	p
Parents	144		4	1.143	.339
Mexican	20	3.00			
Puerto Rican	28	3.25			
Central American		26	3.54		
South American	44	3.07			
Other	26	3.12			
Family Members	144		4	.827	.510
Mexican	20	2.20			
Puerto Rican	28	2.57			
Central American		26	2.81		
South American	44	2.50			
Other	26	2.62			
High School Guidance Counselor	144		4	.433	.784
Mexican	20	1.85			
Puerto Rican	28	2.04			
Central American		26	2.19		
South American	44	1.95			
Other	26	2.15			
High School Teachers	144		4	1.569	.186
Mexican	20	1.95			
Puerto Rican	28	1.82			
Central American		26	2.19		
South American	44	1.73			
Other	26	2.31			
College Admissions Advisors	144		4	1.321	.265
Mexican	20	1.55			
Puerto Rican	28	1.75			
Central American		26	2.19		
South American	44	1.84			
Other	26	2.15			
Community Members	144		4	1.240	.297
Mexican	20	1.65			
Puerto Rican	28	2.18			
Central American		26	2.27		
South American	44	1.80			
Other	26	2.12			
Friends	144		4	.630	.642
Mexican	20	2.50			
Puerto Rican	28	2.82			
Central American		26	2.77		
South American	44	2.59			
Other	26	2.88			

College and University Mailings	144		4	1.553	.190
Mexican	20	2.40			
Puerto Rican	28	2.54			
Central American		26	2.77		
South American	44	2.25			
Other	26	2.81			
Phone Calls from Colleges and Unive	rsities 144		4	3.777	.006*
Mexican	20	1.80			
Puerto Rican	28	1.89			
Central American		26	2.50		
South American	44	1.80			
Other	26	2.77			
College Guide Books	144		4	1.695	.155
Mexican	20	2.35			
Puerto Rican	28	2.61			
Central American		26	2.85		
South American	44	2.18			
Other	26	2.69			

<sup>\*</sup> = significant at the .05 level

#### CHAPTER FIVE

### **Discussion and Implications**

This study examined the factors that influence the college choice process for Hispanic students. Differences among Hispanics in factors influencing the college choice process were examined by gender, generational status (first generation v. non-first generation), and ethnic background (Mexican, Puerto Rican, Central American, South American, Other).

This chapter discusses the results of the study and their implications. The first section provides a discussion of the responses to the research questions and how this study's results compare with previous investigations. Next, implications for future practice and research are addressed, as are the limitations of the study. Finally, the researcher offers some conclusions about the factors that influence the college choice process of Hispanic students.

# Relevance to Previous Research

The data revealed that females considered the first 40 items on the CCS to influence their college choice process more strongly than males. These included 20 factors related to the college search process and 20 factors related to the college selection process. Among the 20 items related to the college search process, 10 were deemed to be external and 10 were internal factors. This was the same for the factors related to the selection process: 10 were external and 10 were internal.

Results related to the external search factors revealed that females consider factors such as size, location, and tuition significantly more strongly when applying to college than do males. These findings are consistent with a study about counselor impact on

college choice. Women rate academic reputation, quality of available programs, size and campus beauty as important when applying to college (Johnson, Stewart, & Eberly, 1991).

Females also considered external factors more strongly than males did when selecting a college to attend. These factors included college characteristics such as appearance of campus, majors offered, and national reputation. These findings are consistent with a study on the impact a counselor has a student's college choice. Women rate campus beauty and national reputation as important when applying to college (Johnson, Stewart, & Eberly, 1991).

The findings related to sources of support during the search process revealed several significant differences by gender, generational status, and ethnic background. First, females relied more on parents as sources of support when searching for a college than did males. This finding is consistent with a study that examined race, class, and gender differences in the college application process. Females were found to utilize more educational and parental resources than males (Valadez, 1998).

Second, first generation college students relied on community members for support during the search process significantly more than non-first generation college students relied on such support. No previous literature examined the role of community members as support systems for first and non-first generation Hispanic students, therefore this is a new finding.

Third, results revealed that there is a significant difference related to the use of college admissions advisors by ethnic background. Central American students reported using college admissions advisors most frequently, while Mexican students reported using advisors least frequently. This finding is consistent with a study that reported that

differences by ethnic background exist in the search methods that are utilized by Hispanic students. Central American students utilize a wider variety of sources than do other Hispanic students (Hurtado, 1992).

The findings related to the sources of support used by participants during the college selection process also revealed several significant differences by gender, generational status, and ethnic background. Two of these significant differences related to gender differences. First, females reported relying on parents as sources of support significantly more than males. Second, females reported relying on family members for support significantly more than males. These findings are consistent with findings from a previous study in which females were found to utilize parents and other educational resources more than males (Valadez, 1998). In this case, family members were considered to be other educational resources.

The findings with respect to generational status revealed that first generation college students relied significantly more heavily on community members during the selection process than did non-first generation college students. These findings are consistent with a study that revealed that second generation college students perceive that they receive more support from their families to attend college than do first generation students (York-Anderson, & Bowman, 1991).

Finally, the results related to differences in sources of support used during the selection process by ethnic background revealed one significant difference. Respondents who identified their ethnic background as "other" reported the highest degree of reliance on phone calls from colleges and universities. On the other hand, both Mexican and South American students reported the lowest levels of reliance on the phone calls. No previous

literature examined the influence of phone calls from colleges and universities on Hispanic students of different ethnic backgrounds, therefore this is a new finding.

While the previously discussed findings were statistically significant, the data also revealed other patterns in the answers of the participants. These practical differences are also worthy of discussion because they have pragmatic and meaningful significance (Suskie, 1996).

Findings related to both internal and external search factors revealed that females are influenced more strongly than males by factors listed in the CCS during the search process. Females are also influenced more strongly than males by both internal and external selection factors. That is, the mean scores for women were higher than the mean scores for men on all the scales of the instrument, as well as on the overall scores (See Table 2). These findings are consistent with studies on gender differences in the college choice process. Women are more thorough in their application processes and they are more effective in utilizing the resources available to them (Litten, 1982; Valadez, 1998).

The findings related to both the internal and external search factors revealed that non-first generation students are influenced more strongly than first generation students by factors listed in the CCS during the search process. Non-first generation students are also influenced more strongly than first generation students by both internal and external search factors. Mean scores on all four scales and total scores of the CCS were lower for first generation students than they were for non-first generation students (See Table 2). These findings are consistent with a study on the college knowledge of first and second generation college students. Non-first generation students have a greater understanding of and knowledge about what to expect at college (York-Anderson & Bowman, 1991).

The findings related to both internal and external search factors revealed that

Central American students are influenced more strongly than the other ethnic backgrounds

by factors listed in the CCS. That is, scores from Central American students were

consistently higher on these two scales than scores from other ethnic groups (See Table

2). No previous literature examined the influence of internal and external search factors on

Hispanic students of different ethnic backgrounds.

The findings related to the sources of support used by participants during the search process also revealed several practical differences by gender, generational status, and ethnic background. First, females relied more heavily on six of the 10 sources of support than males (parents, family members, high school guidance counselor, high school teachers, college admissions advisors, community members). Males relied more heavily on three sources of support than females. These sources of support are friends (2.83 v. 2.64), college and university mailings (2.77 v. 2.65), and phone calls from colleges and universities (2.21 v. 2.06). Females and males relied on college guide books as sources of support during the search process to the same extent (See Table 7). These findings are consistent to some degree with a study on gender differences in the college choice process. Men rate friends' preferences as one of the most important influences in choosing a college (Johnson, Stewart, & Eberly, 1991).

Second, first generation students relied more heavily on eight of the 10 sources of support during the search process than non-first generation students (See Table 8). The two sources of support that non-first generation students relied on more than first generation students are parents (2.99 v. 2.83) and family members (2.45 v. 2.28). These findings are consistent with a study on differences between first and non-first generation

college students. Non-first generation students perceive that they receive more support from their families for college attendance than do first generation students (York-Anderson & Bowman, 1991).

Third, Central American students relied more heavily on eight of the 10 sources of support during the search process than the other four ethnic backgrounds. For example, the mean score on parents was 3.31 for Central American students while mean scores for the others were 2.90, 3.04, 2.77, and 2.85 (See Table 9 for details). The two sources of support that Central Americans did not rely on the most are college and university mailings and phone calls from colleges and universities. No previous literature examined the influence of sources of support during the search process on Hispanic students of different ethnic backgrounds.

The findings related to sources of support used by participants during the selection process also revealed several practical differences by gender, generational status, and ethnic background. First, females relied more heavily than males on six of the 10 sources of support (See Table 10). Males relied more heavily than females on three sources of support. These sources of support were community members (2.03 v. 1.95), friends (2.83 v. 2.56), and college and university mailings (2.55 v. 2.48). Females and males relied on phone calls from colleges and universities as sources of support during the selection process to the same extent. These findings are consistent with a study on race, class, and gender differences when applying to college. Women utilize their resources more effectively then males (Valadez, 1998).

Second, first generation students relied more heavily on seven of the 10 sources of support during the selection process than non-first generation students (See Table 11).

The three sources of support that non-first generation students relied on more than first generation students are parents (3.24 v. 3.03), family members (2.57 v. 2.47), and phone calls from colleges and universities (2.13 v. 2.08). These findings are consistent with a study on the college knowledge of first and non-first generation college students. First generation college students feel that they receive less support from their families to attend college than non-first generation college students (York-Anderson & Bowman, 1991).

Third, Central American students relied more heavily on six of the 10 sources of support during the selection process than students from other ethnic backgrounds. The "Other" students relied more heavily on four sources of support (See Table 12). These sources of support are high school teachers (2.31), friends (2.88), college and university mailings (2.81), and phone calls from colleges and universities (2.77). No previous literature examined the influence of sources of support during the selection process of Hispanic students of different ethnic backgrounds.

# Implications of Raw Data

The raw data from the study have implications for future practice in terms of both the college search and college selection processes. The findings also suggest implications in terms of the sources of support Hispanic students use during the college choice process.

The mean scores for the factors listed on the CCS ranged from a high of 2.32 to a low of 1.33. However, the range between the highest and the lowest mean scores was not very great. It is reasonable to suggest that all the sources of support listed on the instrument were important to the participants, but some were slightly more influential.

The mean scores for the sources of support utilized during the college search and selection processes ranged from a high of 3.19 to a low of 1.90. Again, the limited range

of mean scores suggests that all the sources of support listed in the CCS were important to respondents to some degree, and a few sources (e.g. parents, friends, and family members) were slightly more important to participants than other sources of support (e.g. college admissions advisors, high school teachers, and community members).

The researcher also examined the frequencies with which participants reported strongly agree/agree and strongly disagree/disagree for all the factors listed on the CCS. This enabled the researcher to identify the factors that most and least influenced participants during the college choice process. Results revealed that the five factors that influenced participants the most during the college choice process were majors offered, national reputation of college/university, location of college/university technology available on campus, and tuition. All of these factors are characteristics over which the college or university has control (i.e. external factors). Since it is not likely that admissions officers can change the types of majors offered or the location of the campus, the findings suggest that such officers may have limited control over influencing Hispanic students to select their school, at least in this sense. However, analysis of the results by gender, generational status, and ethnic background suggest there are other steps admissions officers can take to recruit Hispanic students. Those findings are discussed later in this chapter.

The factor that influenced participants the least during both the college search and selection processes was religious beliefs. Unlike the previously mentioned factors, religious beliefs is a characteristic that the individual student has control over. This finding is important because it addresses the stereotype that Hispanic students consider religion as an important aspect of their lives. In this case, religion did not play a role in the

participants choice of a university. The results might have been influenced by the fact that the participants in the present study were all enrolled at a public university. Perhaps Hispanic students for whom religion is important enroll at religiously affiliated schools. But it is important for admissions staff at public universities to recognize that talking with prospective Hispanic students about the religious opportunities on campus may not have any affect on those applicants.

The researcher also calculated the frequencies with which respondents reported heavily/somewhat heavily and did not/rarely relying on in terms of sources of support they used during the college choice process. The findings revealed some differences in the participants' reliance on the sources of support during the two phases of the college choice process. During the college search process, participants relied the most on family and friends and the least on college admissions advisors and community members. These findings suggest that admissions staff who wish to capture the attention of Hispanic applicants early in the college choice process may with to be sure that they talk with family and friends of those applicants. Typically, admissions staff deal extensively with high school guidance counselors and rely on those counselors to refer students to their universities. If Hispanic applicants, however, do not rely on guidance counselors for support during their search process, this strategy many not work. University admissions staff may be well advised to create new mechanisms to reach Hispanic applicants early in the search process.

The findings with respect to who Hispanic students relied on when selecting which college to attend are also interesting. During the college selection process participants relied most on parents and least on high school teachers, college admissions advisors, and

community members. Again, this suggests some different strategies for admissions staff who wish to recruit Hispanic applicants. Once admitted, it may be important for admissions officers to talk with the parents of Hispanic applicants than with the applicants' high school staff or teachers.

# Implications of Analysis

The findings related to the differences among Hispanic students by gender, generational status, and ethnic background also have implications for future practice in terms of both the college search and college selection processes for several constituencies. These constituencies include student affairs professionals, Hispanic students, and the parents of Hispanic students.

First, student affairs professionals, such as admissions counselors, may benefit from the results and have a better understanding of how Hispanic students complete their college search process. The findings suggest there are several steps that admissions counselors could take to more successfully recruit Hispanic students. First, admissions publications that are sent out to Hispanic students should be printed in both English and Spanish. This would enable parents with limited English to better understand information about the college or university. The results of the study suggest that Hispanic students, especially females, rely on parental support during the search process. The more accessible to Hispanic parents colleges make information about the institution, the more support Hispanic parents can provide their students during the search process.

Second, the admissions staff might include at least one bilingual Hispanic admissions counselor. This may make both parents and students feel more comfortable about asking questions about the college or university. The results of the study suggest

that Hispanic students, especially females, are influenced by external factors during both the college search and the college selection processes. Again the more accessible information about the institution during the college search and selection processes is made to Hispanic students and their parents, the easier their college choice process.

Next, admissions counselors need to highlight the support systems that are in place on and off campus for Hispanic students. Examples of support systems on campus include student organizations, mentoring programs, and cultural centers. Support systems off campus include churches and local businesses. The results of the study suggest that Hispanic students, especially females, are influenced by external factors during both the college search and the college selection processes. By letting Hispanic applicants know about the resources available to them on campus and in the local community, admissions counselors may be more successful in recruiting Hispanic students to their campuses.

Finally, admissions counselors should be aware of the needs of first generation college students. Admissions counselors should do their best to paint a complete and clear picture of college life to first generation college students and their parents. This is important because the findings in the present study suggest that first generation students have to rely on sources other than their parents for information about college. One way admissions counselors might accomplish this is to ask current first generation college students to participate in campus recruitment efforts. This would allow current first generation students to share their experiences with and knowledge about the campus with prospective first generation college students.

There are also several steps that admissions counselors can take to help Hispanic students in the college selection process. The first step is to remember that the findings of

this study reveal that parents and family play an important role in the college selection process for Hispanic students. Therefore, admissions counselors should include parents and family in their efforts to recruit students.

Admissions counselors can include parents by sending letters about the campus and the admissions process to both parents and students. Phone calls from current Hispanic students to prospective students and parents might also be an effective recruiting method. The results of the present study suggest that Hispanic students rely on both college mailings and phone calls from colleges for sources of support during the search process.

The admissions office might also invite prospective Hispanic students and their parents to make a campus visit. The students and parents should also be given the opportunity to visit a class. The visit to campus and class will help Hispanic students and parents gather more information and have a clearer understanding of the college or university. The results of the study suggest that Hispanic students, especially females, are influenced by external factors during both the college search and the college selection processes. The more information Hispanic students receive about the institution during the college search and selection processes, the more informed they will be during their college choice process.

The second constituency that may benefit from the results of the present study is Hispanic students. The findings suggest that there are several steps that Hispanic students can take when searching for a college. First, Hispanic students should start attending college fairs and information sessions early in their high school careers. This will enable students to start to gather information about college early on. Hispanic students should

also collect information from a wide variety of schools so that they can compare and contrast different types of schools. The results of the study suggest that Hispanic students, especially females, are influenced by external factors during both the college search process. The more information Hispanic students gather about the institution during the college search process, the more informed they will be during the college choice process.

Hispanic students should also ask family and community members about college. The students can ask either family or community members who have attended college about their own college search process. Students may get advice and gain knowledge through these conversations. The results of the present study suggest that Hispanic students rely on family and community members for sources of support during the search process.

There are also several steps that Hispanic students can take in their college selection process. The present study suggests that there are a number of factors that influence Hispanic students in the college selection process. But, the study also suggests that the influence of such factors vary by different factors (gender, generational status, and ethnic background). This suggests that different students may be influenced by different factors. To make best use of the present findings, students should develop a list of their own preferences. This will help them narrow down their choices and make a final selection. By knowing their personal preferences, the college selection process may be easier for Hispanic students.

Hispanic students might also make visits to the colleges they applied to. While visiting the colleges, Hispanic students should speak with current students and faculty. Hispanic students should also try to visit a class. Such campus visits might enable Hispanic

students to make a more knowledgeable decision. The results of the study suggest that Hispanic students, especially females, are influenced by external factors during both the college search and the college selection processes. If Hispanic students receive sufficient information about the institution during the college search and selection processes, it may make their college choice process easier.

The last constituency that may benefit from the results of this study is the parents of Hispanic students. Results of this study suggest that Hispanic students rely on their parents as a source of support during the college search process. Parents can support their Hispanic students during the college search process by attending college nights and information sessions. By attending the information sessions, parents develop their own knowledge base that they can share with their children.

Parents can also support their children in the college selection process by taking several steps. Results of this study suggest that Hispanic students rely on their parents as a source of support during the college search process. Parents should go on college visits with their children. Parents should also ask for names of people who can answer questions once they leave campus. By collecting information on the college visits, parents can serve as more knowledgeable support systems for their children.

Parents can also help their children develop a list of preferences about colleges and universities and their own characteristics (e.g. first generation, female). Results of this study suggest that Hispanic students rely on their parents as a source of support during the college search process. The present study also suggests that there are a number of factors that influence Hispanic students in the college selection process. At the same time, the study suggests that the influence of such factors vary by different factors (gender,

generational status, and ethnic background). This suggests that different students may be influenced by different factors. Developing a list of their own preferences and characteristics may help students decide which college meets their needs the best.

The present study also has implications for future research. First, this study might be replicated with Hispanic students who are currently involved in the college search and selection processes. The present study examined preferences among Hispanic students currently enrolled in college. Research on students who are currently completing the college choice process may reveal different results.

Second, this study might be replicated to explore differences that may exist between American born Hispanics and international Hispanics in the college choice process. The present study did not distinguish between American born Hispanics and international Hispanics. Such a study may reveal whether different Hispanic students require different recruitment strategies.

Third, the present study explored the college choice process from the perspective of students. Future research is needed to explore what Hispanic parents experience when their children are going through the college choice process. The parents could be interviewed about what factors they consider to be important in the college choice process. Parents could also be asked about their perceptions of the role they play in their child's college choice process. The findings from such a study might help universities develop programs to support Hispanic parents and students in the college choice process.

Finally, this study might be replicated to explore differences in the college choice process that may exist between Hispanic students who attend two year colleges and Hispanic students who attend four year colleges. The present study examined preferences

among Hispanic students at a four year institution only. Findings from a comparative study may reveal whether there are differences in the factors that influence the college choice processes of Hispanic students by the type of institution they attend.

#### Limitations

As with any study, the present research had some limitations. First, this study had a limited response rate. The response rate was only 38%. The low response rate limits the generalizability of the findings, though this limitation was mitigated to some degree by the sample size (N=144).

Second, the technique used to collect data was a quantitative survey. The technique may have limited the responses of the participants. The participants were limited to rating only the factors that were included in the CCS. They were not given the opportunity to list other factors that may have influenced their college choice process. If the participants were given the opportunity to list other factors, different results might have been rendered.

Third, the instrument was designed by the researcher. Although the researcher conducted focus groups and studied the literature to develop the instrument and the instrument was reviewed by three experts, the instrument had not been tested prior to this study.

Fourth, it is possible that some items were misinterpreted by the respondents. For example, the item "impression of campus" could mean campus appearance to some participants and campus climate to others. The misinterpretation of the items might have skewed the results.

Despite these limitations, the study provided information about the college choice process for Hispanic students. Perhaps by better understanding the college choice process of Hispanic students, higher education administrators can learn how to better recruit Hispanic students.

In summary, this study was valuable because it contributed to the understanding of the college choice process of Hispanic students. The results of this study revealed both pragmatic and significant differences in the college choice process of Hispanic students by gender, generational status, and ethnic background differences. Higher education administrators may strive to better understand the differences in the college choice process of Hispanic students and consider these differences in designing recruitment and admissions efforts.

Understanding the college choice process of Hispanic students is important because Hispanics are a rapidly growing segment of the United States, but one which is not equitably represented in higher education. For example, the 1990 census reported that Hispanics comprised 9% of the total U.S. population, yet Hispanics accounted for only 6% of students enrolled in higher education ("College Enrollment,", 1998; "We the American...Hispanics", 1993).

While this gap between the growth of Hispanics in the general population and Hispanic college enrollment may be due to several factors, recruiting Hispanic students to college is a major step towards eliminating the gap. The present study helped to eliminate that gap by providing higher education administrators with information on the factors that affect Hispanic students in the college choice process. By considering these factors when

designing recruitment strategies, colleges and universities may be more successful in recruiting and admitting Hispanic students.