

PRE- AND POST-MATRICULATION DEMOGRAPHIC AND ACADEMIC PROFILES
OF UNDERGRADUATE HISPANIC STUDENTS:
A SINGLE-INSTITUTION CASE STUDY

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This study sought to identify pre- and post-matriculation characteristics of undergraduate Hispanic students at the University of North Texas (UNT). The study also examined demographic trends among this population. Eleven purposes guided the study: 1) to determine geographic origins of the undergraduate Hispanic students at UNT in terms of location of educational institution attended prior to matriculation; 2) to establish whether students entered UNT as true freshmen or transfer students; 3) to ascertain the gender composition of undergraduate Hispanic students at UNT; 4) to report the highest level of education achieved by parents of undergraduate Hispanic students at UNT; 5) to explore patterns in major selection of undergraduate Hispanic students at UNT and who or what influenced that choice of major; 6) to ascertain the percentage of undergraduate Hispanic students at UNT who plan to use financial aid during their enrollment; 7) to examine the graduation rates among undergraduate Hispanic students at UNT; 8) to determine who is most influential in the academic decisions made by Hispanic undergraduate students at UNT; 9) to discover what type of emotional support is given to Hispanic students pertaining to their college enrollment and success; 10) to establish why Hispanic undergraduate students elect to attend UNT; and 11) to discover what factors prohibit new undergraduate Hispanic students at UNT from graduating.

Data were collected from undergraduate Hispanic students attending spring 2003 orientation using a new-student survey instrument. Additional data were collected using UNT student information system reports. Chi-square statistics were performed to identify significant results.

Results of the study indicated both characteristics substantiated in previous research and characteristics unique to this sample existed among the undergraduate Hispanic students at UNT. The results, particularly as concerned with the parental influence exerted on students in the study, departed from the finding of past research. Additional research on this population was warranted and suggested.

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CHAPTER 1

INTRODUCTION

Demographic shifts in population are not uncommon in the United States. Research literature has documented these shifts and the impending challenges (Laden, 1994; Ludwig, 1993; Rendon, Hope, & associates, 1996). California has already faced the challenge of shifting demographics as its population composition changed in the 1990's (Laden, 1994). By 2010, students of color are expected to make-up half of the population in states such as California, Texas, Florida and New York (Rendon et al., 1996).

Texas is facing this challenge and is beginning to plan for a demographic shift in its college-age population. The Texas Higher Education Coordinating Board (THECB) has a goal to increase the number of students who will likely take advantage of access to higher education in the future. As a part of their Closing the Gaps master plan, 2000-2015, the THECB has set four goals: 1) close the gaps in participation, 2) close the gaps in success, 3) close the gaps in excellence, and 4) close the gaps in research. Of particular interest to college and university student development divisions is the goal of increasing the participation and success of students.

According to Closing the Gaps (2000), the percentage of the population in Texas enrolled in higher education was only 5%, falling somewhat below the national average of 5.4%. In comparison with the ten most populous states, Texas falls behind four states – Illinois, California, New York, and Michigan – in the number of students enrolled in

institutions of higher education. Further compounding the problem is the fact that during the period 1990-2000 the overall participation rate in Texas higher education has decreased from 5.3% to 4.9% (THECB, 2000). Thus, Texas is beginning its participation expansion efforts well behind those of other states. Increasing the participation rate of students by 50% by 2015 is a goal of the Closing the Gaps plan, which means public colleges and universities in Texas must increase enrollments by 500,000 students. The THECB predicts that even if higher education does nothing at all, enrollments will increase by 240,000 students simply due to the expected population growth. At issue is how to serve – and fund – the enrollment and success of 300,000 additional students who are not currently expected to enroll in higher education.

To find these additional 300,000 students, the changing demographics of Texas must be understood. According to information provided by the Closing the Gaps plan, Texas will be a majority-minority state by 2009; the Hispanic population will make up the largest portion of the growth. Estimates are that by 2030 the Hispanic population will comprise the majority (46%) of the Texas population (Texas State Data Center, 2000). The largest student population growth will consist of Hispanic students, who, according to the Closing the Gaps report, participate in higher education at low levels. As of the fall 2000, only 8.6% of the Hispanic population were participating in higher education compared to 11% of African Americans and 16.3% of Anglos. A particular emphasis is being placed on increasing the participation rates of the Hispanic college student population because they are expected to comprise the largest segment of Texas. A goal has been set to reach 5.7% total participation amongst all college-going students by 2015.

Furthermore, to meet the goal of “closing the gaps in success,” the Closing the Gaps plan calls for increasing the number of degrees, certificates and other identifiable student achievements by 50%. To accomplish this goal, the plan calls for increasing the number of students of Hispanic and African American descent who receive their bachelor’s degrees and are representative of their proportion in the general population. As reported in the plan, currently less than half of the students who enroll in institutions of higher education graduate with degrees within six years.

To accurately and effectively increase the number of students attending an institution, the institution should first understand the characteristics of its own student population. Numerous and different aspects of the college or university influence students and their decision to matriculate in, and graduate from, that institution. Students are affected differently depending on their ethnicity. A greater understanding of how the institution affects the students and their opinions of that institution can help increase the total number of students at the institution.

Statement of the Problem

This study sought to examine and identify the pre-matriculation characteristics and post-matriculation expectations of Hispanic undergraduate students at the University of North Texas. The study also sought to identify demographic trends among undergraduate Hispanic students at the University of North Texas.

Purposes of the Study

The purposes of this study were to:

- 1) determine the geographic origins of the undergraduate Hispanic students at the University of North Texas in terms of location of educational institution attended prior to matriculation;
- 2) determine whether the students enter as freshmen or transfer from other higher education institutions;
- 3) determine the gender composition of undergraduate Hispanic students at UNT;
- 4) report the highest level of education achieved by parents of undergraduate Hispanic students at the University of North Texas;
- 5) explore patterns in academic major selection among undergraduate Hispanic students at UNT and what/who influenced that choice of major;
- 6) ascertain the percentage of undergraduate Hispanic students who plan to use financial aid for educational purposes;
- 7) examine graduation rates among undergraduate Hispanic students at the University of North Texas;
- 8) determine who is most influential in the academic decisions made by Hispanic undergraduate students at UNT;
- 9) discover what type of emotional support is given to Hispanic students pertaining to college enrollment and success;
- 10) establish why Hispanic undergraduate students elect to attend UNT;

- 11) discover what factors prohibit new undergraduate Hispanic students at UNT from graduating.

Research Questions

The following research questions directed the research reported in this study:

- 1) What geographic regions of Texas produce the most Hispanic students who matriculate at UNT?
- 2) What are the percentages of Hispanic students at the University of North Texas who are true freshmen versus transfer students?
- 3) What is the gender composition of undergraduate Hispanic students at the University of North Texas?
- 4) What is the highest level of education achieved by parents of undergraduate Hispanic students at the University of North Texas?
- 5) What majors are most selected by undergraduate Hispanic students at the University of North Texas and what/who influenced that choice?
- 6) What percentage of undergraduate Hispanic students plan to use financial aid at the University of North Texas and report the lack of financial aid as a barrier to their academic completion?
- 7) What is the six-year graduation rate of Texas undergraduate Hispanic students at the University of North Texas?
- 8) Who is most influential in the academic decisions made by undergraduate Hispanic students at the University of North Texas?

- 9) What types of emotional support are given by family members of undergraduate Hispanic students concerning their plans to attend and succeed in college?
- 10) Why did enrolled undergraduate Hispanic students choose to attend the University of North Texas?
- 11) What do new Hispanic students think keeps them from graduating from the University of North Texas?

Significance of the Study

The Hispanic population in Texas is growing; the number of Hispanic students attending institutions of higher education is not keeping pace with this growth. The University of North Texas, located in Denton, Texas, is situated amongst the fastest growing counties in the nation – Collin County, Dallas County, Tarrant County, and Denton County (US Census, 2000). The Hispanic population increased 178.2% in Collin County, 110% in Dallas County, 104% in Tarrant County and 176.8% in Denton County between 1990 and 2000 (US Census, 2000). This increase brings the total Hispanic population to 10.3% in Collin County, 29.9% in Dallas County, 19.7% in Tarrant County and 12.2% in Denton County (US Census, 2000). With this population growth and the expected Hispanic student growth reported in the Closing the Gaps master plan, it is imperative that universities in the area maintain a representative Hispanic student population at their own institutions. As of fall 2001 enrollment figures, Dallas/Fort Worth area public universities were falling short of the Hispanic population projections in the surrounding counties. In comparison to the surrounding county populations, the University of Texas at Arlington had a 12.2% Hispanic population, the University of

Texas at Dallas an 8% Hispanic population, and the University of North Texas an 8.8% Hispanic presence (The Higher Education Coordinating Board, 2002). Furthermore, for a large number of Hispanic students, their education concludes at the secondary school level (Erlach, 2000). This loss of students compounded by the increasing segregation of Latinos in United States high schools suggests that open-access universities located near areas of high Hispanic growth will have the best opportunity to see increases in undergraduate Hispanic student populations (Hurtado, 1994).

The only way the University of North Texas can increase its Hispanic student enrollment is to increase the programs and other benefits of higher education that make the institution attractive. To do this, the University of North Texas first must understand where it excels or lags behind in terms of what is available for undergraduate Hispanic students at the university. Major barriers exist that prevent or hinder the participation of Hispanic students including, low socioeconomic status, the effects of culture and stereotyping, financial constraints, family obligations, and underpreparation (Rodriguez, Guido-DiBrito, Torres, & Talbot, 2000). Identifying these barriers can assist in the successful retention of Hispanic students. No one individual can make the changes necessary however. Administrators, staff, faculty and students should collaborate to explore the needs and expectations of their minority students (Jones, Castellanos, & Cole, 2002). To better develop strategies to improve the Hispanic student outcomes, campuses should strive to understand their own Hispanic students' experiences by conducting research on that particular student group (Hurtado, 1994).

Institutional Description

The University of North Texas (UNT) was the sole institution involved in this study. A four-year, comprehensive metropolitan university, UNT is the largest university in the Dallas/Fort Worth metroplex area. Located in Denton, Texas, a town of approximately 75,000 residents, the main campus is thirty-five miles north of both Dallas and Fort Worth and located on I-35 East, a major interstate highway through Texas. The campus is composed of 151 structures on 500 acres. The Denton campus is the flagship of a multi-institutional system, which includes the UNT Health Science Center in Fort Worth and the UNT Dallas Campus in Dallas, Texas, positioned to become UNT – Dallas in the future.

In 1987, UNT was designated as one of five comprehensive research and graduate institutions in Texas and is one of Texas' "Big Five" institutions. As such, the campus provides many public services to the community and serves in the economic diversification of the Dallas-Ft. Worth metroplex. The Carnegie Foundation for the Advancement of Teaching has classified UNT as Doctoral/Research University-Extensive.

More than 30,000 students from every state in the nation and 125 foreign countries are enrolled at UNT. Faculty members number more than 1,000. The university offers 98 Bachelor's degree programs, 125 Master's degree programs and 47 Doctoral degree programs. Since its inception, UNT has conferred 171,392 Bachelor's, Master's and Doctoral degrees. UNT is accredited by the Southern Association of Schools and many other accrediting agencies for the university and its academic departments.

Mission of the University

The mission of the university is multi-purposed. According to the University of North Texas Undergraduate Bulletin 2001-2002, one purpose is “to achieve high quality in instruction, scholarship and service.” To do this, the university “fosters excellence and innovation in teaching,” supporting “research and creative activities that expand knowledge,” and “assuming a leadership role in addressing community needs.” A second purpose is to “stress understanding and appreciation of the historical, intellectual, technological, scientific, and cultural nature of the search for knowledge.” Third, to “enhance access to higher education through the use of emerging information and telecommunication technologies.” The mission also proposes to “promote the advancement and preservation of the arts.” The remaining purposes of the mission address the students’ needs: to “nurture the development of students” by providing opportunities for “intellectual, physical, emotional, social and career growth;” to “support a culturally diverse environment and advocate mutual respect for all members of the community;” and to “provide a high quality residential environment and opportunities for lifelong learning.” The university aspires to be one of the state’s top-tier universities. Achieving this level means the university will be a premier educational, intellectual, research and cultural resource. The vision includes becoming an “inclusive and diverse institution with an international perspective, helping to create an informed citizenry, high-quality graduates, and a workforce well prepared for the global economy.”

Recruitment Programs and Admission Requirements

The university has made increased efforts to recruit students of color. This increased effort has included adding three new positions of Admission Counselors. The

Admission Counselor positions, each held by a person of color – one African American and two bi-lingual Hispanic individuals – were developed to be recruitment intensive both within the local Dallas/Fort Worth metroplex and the state of Texas. The primary function of these positions is to be “out in the high schools” recruiting students. The target area for these three individuals is largely the high minority regions of Texas and majority-minority high schools. The Office of Equity and Diversity also added a new position, Outreach Counselor, to their staff. The outreach counselor initiates and maintains relationships with the minority community within the Dallas/Fort Worth metroplex and works closely with the junior high schools and elementary school minority students in an effort to familiarize these students with the university. Beyond the addition of personnel, the Admissions Office and the Office of Equity and Diversity have increased the number of recruitment programs targeting minority students. These programs include: admission workshops at inner-city high schools, high school counselor workshops targeting the counselors from inner-city high schools, on-campus programs geared to familiarize minority students with the rigors of university requirements, and off-campus programs, held within the Dallas and Fort Worth city limits, where inner-city high school students and their families are invited to come meet UNT administrative and academic personnel. Institutions that succeed in the areas of recruitment and retention of Latino students will also have success in maintaining a favorable institutional climate for these same students (Hurtado, 1994). Since 1990, African American enrollment has increased 47.9% and Hispanic enrollment has increased 93.0%.

Undergraduate admission to UNT is determined by a set of minimum requirements for freshmen or transfer students. Admission for students with no college-level work is dependent on their high school rank in class and a minimum SAT or ACT score. At the time of this study, freshmen ranked within the top quarter of their high school class are automatically accepted to UNT regardless of their SAT/ACT score. Students with college work are considered transfer students and must meet a minimum grade point average on their college level work as determined by the number of college level hours they have completed. Students with less than 30 hours of college level work must meet the minimum grade point average requirement and the requirements for freshmen based on their high school rank in class and SAT/ACT score minimum. No special admission consideration, beyond the regular admission requirements, is given to students of color.

Students who do not meet the minimum admission requirements may be admitted through a program called "Individual Review." This program allows students to submit additional information about themselves by way of letters of recommendation and a personal essay. An admission committee then reviews all the information available about the student in an effort to determine their probability of success at the university level. Students found to have reasonable probability for success are fully admitted to the university with only one stipulation, they must take a course on academic study skills, Psychology 1000: Personal and Academic Effectiveness.

Academic Degree Programs

The university offers 98 undergraduate degree programs housed within its nine colleges and schools: the College of Arts and Sciences, the College of Business

Administration, the College of Education, the College of Music, the College of Engineering, the School of Community Service, the School of Visual Arts, the School of Merchandising and Hospitality Management and the School of Library and Information Sciences. The College of Engineering was the newest college at UNT, added the fall 2002 semester. With the exception of just a few degree programs (music, business, art, education, and radio/television/film), entrance into the different degree options is open to all students admitted to the university. There is a forty-seven hour university core, with the College of Business Administration and the College of Arts and Sciences having their own additional “major core.”

Residence Facilities

UNT is a residential campus with ten residence halls and a privately owned apartment complex. Approximately 4547 student beds were occupied within on-campus housing during the fall of 2001. All unmarried, undergraduate students with less than 30 hours of college level work and who enroll in nine or more hours are required to live on campus. However, due to the increasing numbers of freshmen at UNT, the last two years have found the residence halls full prior to the beginning of the fall. In an effort to try and accommodate new freshmen students, on-campus housing accommodations have been restricted for transfer students and those returning to housing from the previous year. While this has limited the number of upperclassmen in housing, it has not eliminated the housing shortage for new freshmen. The close proximity to the Dallas/Fort Worth metroplex provides commuting opportunities for many students.

Student Profile

The majority of students enrolling at UNT matriculate from the Dallas/Fort Worth metroplex area and 90% of students enter UNT from within Texas. The entire UNT student body, graduate and undergraduate, is 56.6% female and 43.4% male. UNT is a majority Caucasian campus with 70.1% of students falling into that ethnicity. The remaining ethnic breakdown is: 9.2% African American, 8.2% Hispanic, 0.8% Native American/Alaskan, 4.0% Asian and Pacific Islander, 5.5% non-residential alien, and 2.4% of unknown ethnicity. The average age of undergraduate students is 22.5 years. The retention rate of new from high school students enrolled fall of 2000 and returning fall of 2001 was 69.3%. For the 2000-2001 academic year, 12,155 students received some sort of federal financial aid – excluding scholarships.

Faculty and Administrative Profile

UNT is a major employer within the area employing 1870 faculty members and 1913 staff. Within the faculty ranks, UNT holds 844 full-time faculty, 262 part-time faculty and 2 faculty members on modified service. UNT also employs 289 teaching fellows and 473 teaching assistants. Faculty ranks are divided into tenured, tenure track and non-tenure track. Within these three categories are a total of 870 faculty members. Ethnicity is recorded and reported within these three categories and breakdown as: 728 Caucasian, 37 African American, 31 Hispanic, 49 Asian, 6 American Indian and 19 “other.” The student-to-teacher ratio, as determined by the THECB definition, is 16.8:1. Within the ranks of non-teaching, regular, retirement eligible staff members, UNT employs 501 secretarial/clerical, 634 professional, 287 service maintenance, 283

technical/para-professional, 107 skilled craftsmen, and 101 executive/administrative/managerial.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

Introduction

The Hispanic student population is relatively new to research. Prior to 1970, Hispanics were virtually ignored in research literature (Orfield, 1986). Within the last ten years, thanks to the increasing Hispanic population in the United States, the amount of research conducted on Hispanic students entering college has increased. The Hispanic population as a whole is a young population with an average age of 29 years (US Census Bureau, 2000). As the Hispanic population increases and the college-going Hispanic population increases, more research will be available on this potential college going population.

General Theories of Retention

Tinto (1991) has developed a widely accepted model of student attrition. He formulated a theoretical model to explain different forms of dropout behavior and how interaction between individuals and their environment might lead to such behavior. His longitudinal Student Integration Model proposes that students are more likely to depart from college if they never become integrated within the college environment or if they continue to maintain values different from the values held by the college. Further, variations in academic preparedness can affect persistence of both minority and non-minority students (Nora & Cabrera, 1999). All students enter the college environment with their own background commitments and attributes: race, gender, pre-college

experiences and family backgrounds. Once immersed in the college environment, however, students who become adapted to the social and academic aspects of the college through involvement in extracurricular activities, interactions with other students and socialization with faculty will develop strong commitments to complete their degree. These students will be more likely to persist than those who never develop such commitments. Students will tend to drop out if they believe the time, energy, and costs are no longer worth the benefit and rewards of staying in college.

Bean (1980) has proposed an alternative model to explain students' persistence in college: the Student Attrition Model. Based on a model of organization turnover, Bean proposes that student attrition is much like that of turnover in business organizations and is influenced by intentions to stay or leave. In this model, beliefs held by students ultimately shape their intentions to persist or drop out. These beliefs are affected by the students' experiences in higher education. The model also proposes that external factors can affect student experience at school.

Padilla's expertise model (1991) focuses on knowledge that allows students to be successful and overcome barriers within the college environment. This theory suggests that successful students are those who are "experts" at being students. Their successes stem from the acquisition of two types of knowledge: theoretical and heuristic.

Theoretical knowledge is typically considered book knowledge whereas heuristic knowledge is specific to a particular college and is learned through experimentation within the college environment. Examples of heuristic knowledge specific to the college experience include registration procedures, how and when to drop courses, ways to get academic advising, and etcetera. Students arrive on campus with a degree of

theoretical and heuristic knowledge. As students progress through coursework, they acquire additional theoretical knowledge which culminates in the obtainment of a degree if they persist to completion. Students must also acquire a degree of heuristic knowledge to be successful in institutions of higher education. Unlike theoretical knowledge, heuristic knowledge is seldom formally taught to college students. Rather, it is passed along from student to student as each progress through the collegial system. Students who fail to acquire this heuristic knowledge are more likely to fail in their pursuit of a degree.

Decision to Attend College

St. John (1991) sought to identify factors that influence students' decisions to attend college. His research assumed that the students' backgrounds, regions of residence, academic achievement, high school experiences, their goals and student financial aid influenced decisions. Results of the study indicated that the decision to attend college by blacks and Hispanics are different from the decision of other students. Hispanics were less likely to attend college than all other students. Poor academic preparedness prevents Hispanics from attending college and that they do not have the higher aspirations necessary to overcome this lack of preparedness. To assist these students, interventions should be considered. First, programs to help with academic achievement were designated as important by the researchers. Second, programs that help minority students aspire to attend college were mentioned as important since college aspirations tended to alleviate some of the negativity associated with academic non-preparedness. Finally, researchers found that student aid was important for minority students' opportunities to attend college.

Sosa (2003) tackled the subject of the undereducation of Hispanic students. In his article, Sosa mentions that many of the barriers to Hispanic student enrollment in higher education are based on familial, social and cultural expectations. A study group, made of about half Hispanic students, studied the issue of barriers for Hispanic student enrollment in higher education and submitted four distinct issues that contribute to that issue. First was the issue of poverty and family. Hispanic students are taught, at a young age, that they should work in order to help support their family. This belief is passed from parent to student and can unconsciously lead to the belief that work is much more honorable than an education. The cost of higher education can also be a deterrent, as many Hispanic families believe they cannot afford to pay the tuition. Add to that the fact that many Hispanic students do not have parents that attended college and the additional barriers of lack of family tradition in college or lack of family commitment to higher education become an issue. Many families believe that by attending an institution of higher education, their children will be influenced by the “Anglos” enrolled and will forsake their Hispanic heritage. Finally, early pregnancy is a problem among Hispanic females. Due at least in part to the Hispanic culture and heritage, Hispanic females feel they have become an adult at the age of fifteen and may take on more adult activities. A second category of barriers is the issue of the unknown. Once again, since Hispanic students are often the first in their families to attend school at an institution of higher education, students do not have the benefit of highly educated role models and are intimidated and confused by the process of enrolling. Students often fear they may not fit in and worry about discrimination. The third category concerned the issue of low expectations placed on Hispanic students. As mentioned previously,

instilled within the Hispanic culture is the importance of work. This can result in students having a lower expectation on themselves to complete college and the expectation that any job, even blue-collar work, equals success. Hispanic students often fear leaving home and their parents often fear their leaving of home as well. Finally, expectations of Hispanic students are often lower among those people, outside of family, who work with Hispanic students. The final category included issues concerning unawareness. Based mostly on the fact that Hispanic students are often the first in their families to enroll at institutions of higher education, they are often hindered by a lack scholarship opportunities and information about where to receive help to enroll. They also have not had the benefit of information concerning the advantages of higher education, possible income opportunities available for degreed individuals and the courses needed in grade school to help prepare for university enrollment.

Transition to Community College

Researchers have examined the transition of minority students into community colleges (Castellanos & Fujitsubo, 1997; Kraemer, 1995; Rendon & Valadez, 1993; Solis, 1995; Weissman, Bulakowski, & Jumisko, 1998). Since 57% of Hispanic students enroll at community colleges instead of senior institutions (Wilds, 2000), community colleges provide a venue for the study of Hispanic students. This research is of benefit to senior institutions as well, since it is their hope that these same students will transfer from community colleges into senior institutions and persevere to graduation. As universities seek to identify ways to attract more Hispanic students to their institutions, their focus will likely turn toward community colleges. Laden (1994) identifies community

colleges as the primary access of Hispanic students into higher education since the 1960's.

Rendon and Valadez (1993) conducted a study of Hispanic student transition to community colleges. Their study examined factors associated with transfer from community colleges to senior institutions. In this study, Rendon and Valadez identified family as influential in student desire to transfer and complete their degrees. Economic considerations also influence students. In a depressed economy, students feel a need to complete training that will provide the quickest and surest entry into work. Other influences on community college transfer included knowledge of how to work the system and feelings of "unwelcome" exhibited by a mostly white faculty and administrators.

Mathematics ability, academic performance and intent to transfer have been found to be associated with the transfer of Hispanic students from community colleges to senior institutions (Kraemer, 1995). Of the three, intent to transfer was the strongest predictor of transfer behavior. It was Kraemer's recommendation that this intent to transfer be fostered early in the student's academic career at the community college and that they continue to receive affirmation of this intent throughout their tenure at the college.

Solis (1995) used personal, financial, family, peer and instructional variables as causal variables to study students' perceptions of the probability of their success in community college vocational programs. Results indicated that only "motivation to persist" and "commitment to attend" was significantly related to persistence (p. 12). The other variables interacted with persistence in an indirect manner. Solis concluded that

colleges should examine how they counsel Hispanic students. Factors believed to directly influence persistence may actually only indirectly influence Hispanic students when those factors interact with other present causal factors.

The success of Mexican-American women enrolled in community colleges was the subject of a study conducted by Castellanos and Fujitsubo (1997). Specifically, the process leading to attrition among these students was studied. The researchers investigated a model of attrition which considered psychosocial and sociocultural barriers in education and how these barriers influence Mexican American women's decisions to drop out of college. The Educational Barriers Scale was used to measure the extent to which educational barriers had been encountered at the college level. Students were also given the Beck Depression Inventory since the researchers wished to determine if the stress associated with educational barriers would lead to depression and to either poor academic success or the decision to drop out. Acculturation to the campus was also measured using the Acculturation Rating Scale for Mexican-Americans. The researchers found a significant correlation between acculturation and depression. There was no relationship observed between depression and academic performance nor the number of educational barriers encountered and academic performance. Researchers believed that slowing the academic pace for Mexican-American college women might help these students be more successful. A second approach would be to target Mexican-American women at younger ages and begin mentoring programs and other assistance that would lead students to find more comfortable and capable means for completing their college degrees.

Weissman et al. (1998) also focused on minority students' transitions to a community college. White, black and Hispanic freshmen were included in the study which gathered information by way of focus groups. Conducted at a single institution, this study focused on three areas: goals and expectations of the students, transition to the college, and the fit to that particular institution. In relation to goals and expectations, all students perceived a connection between a higher education degree and getting a good job, improving income, and providing opportunities for advancement. Black and Hispanic students, more frequently than white students, reported wanting to go to college to be an example for others and often were the first person in their family to go to college. Educational goals varied between the ethnic groups as well. White students made mention of getting their basics and then transferring. The majority of Hispanic students reported wishing to complete an associate's degree. The majority of black students wanted to complete either a certificate or associate's degree. Transition to the community college was made easier through the support of family and friends. Hispanic students particularly reported that family was a major influence on their decision to attend college. All student groups indicated that it was very important for them to succeed in college. When asked about resources for information and help, Hispanic students declared their dependence on friends, whereas black and white students indicated that instructors were their most common resource for information and help.

Transition to College

Family is an important consideration for Hispanic students and their desire to persist in their college education – whether at a community college or a senior university (Christie & Dinham, 1992; Hernandez, 2000; Hurtado, Carter & Spuler, 1996; Mendez-

Caitlin, 1995; Nora & Cabrera, 1996; Quevedo-Garcia, 1987; Rendon & Valadez, 1993; Suarez & Fowers, 1997; Weissman et al., 1998). Quevedo-Garcia (1987) found that students were not only influenced by family, but often selected their college due to its proximity to their family. The entire family became involved with the student's collegial goals and activities. Likewise, the students remained very involved in the family's life, continued their familial responsibilities and attempted to maintain academic integrity. This strong familial attachment and the influences of their culture were then brought to the college campus and affected their college experience.

The study by Hurtado et al. (1996) also addressed students' transitions into college but did not specify community colleges. Through the use of the Student Adaptation to College Questionnaire, the researchers found indication that not only does evidence of discrimination affect adjustment, but inter-personal dynamics can affect adjustment as well. Increased communication opportunities between ethnic/racial groups helped with adjustment. Students also reported, as in the previous study, that parents/family were influential in their adjustment. However, this study also found that peer groups were equally as instrumental in adjustment. Their final conclusion was that in-college experiences affected students' adjustment much more than background characteristics.

Nora and Cabrera (1996) examined students' perceptions of prejudice and how they affect students' college achievements. The study, conducted at a predominantly white university, examined several factors assumed to play critical roles in the persistence of students – both minority and non-minority. Four major categories of factors were examined: 1) academic preparedness, 2) separation from friends and

family, 3) perceptions of prejudice and 4) models of persistence unique to minority students. While minority students, on average, entered college with lower academic preparedness; academic preparedness was not found to exert a stronger influence on minorities than non-minorities. Both groups reported that parental support had a positive effect on their college experience. Encouragement from parents and positive interactions with faculty provided the most positive effects on students and their interaction with the college environment. The authors found that minority students were more likely to perceive discrimination and prejudice and more likely to report negative in-class incidents than their white counterparts. However, even though they perceived discriminatory incidents, these incidents did not seem to impact their persistence.

In 1996, Hurtado et al. examined Latino students' sense of belonging as affected by college transition and perceptions of racial climate on the college campus. Sense of belonging had a strong correlation to course discussions with other students and faculty outside of class. The researchers found that these activities suggested that the merging of academic and personal interactions contributed to the sense of belonging. Meanwhile, academic performance was not significantly associated with sense of belonging. In regard to how organizational membership was associated with sense of belonging, it was found that early memberships tended to have lasting effects on students' sense of belonging. However, memberships that occurred later in students' college careers also showed effects. For example, social-community organizations were most significantly related to sense of belonging when students joined during their third year. Minority students joining racial/ethnic organizations did not report a higher sense of belonging than non-members except in the cases where students had reported

racial/ethnic tension on campus. In those instances, students who joined racial/ethnic organizations did report a higher sense of belonging.

Loneliness and alienation among Hispanic college students interacted with biculturalism, individualism, and difference from family and peers (Suarez & Fowers, 1997). The study was designed to determine if any of these factors helped alleviate the stress of transition for Hispanic college students. There was an inverse relationship between biculturalism and loneliness or alienation. A positive relationship existed between feelings of loneliness and perceived difference from family while perceived difference from peers was not significantly associated with those same feelings. There was no significant difference found in the interaction between biculturalism and difference from family or peers. In this study, biculturalism and “differentness” from family had a direct effect on the well being of Hispanic students rather than just being a stress-buffering factor.

Student Persistence in College

Hispanic student dropouts were studied and found to be each very unique in their reasoning behind why they dropped out of college (Sanchez, Marder, Berry, & Ross, 1992). Sanchez et al. (1992), studied Hispanic dropouts and their reasons for leaving. The majority of students did not leave due to academic dismissal as had been assumed. Instead, the major reasons for dropping out were either personal and/or economic in nature. The students fit into two categories: those who dropped out to “grow up” and assume adult roles and those who felt they could not perform family roles adequately while attending college. The dropping-out behavior was largely due to an allegiance to family. The majority of students who dropped out did so after weighing the

decision for several weeks or months and consulted with their families concerning their decisions. Therefore, myths behind policies to assist Hispanic students academically may be ineffective in preventing Hispanic students from leaving college. In comparison to students who suffered academic dismissal, students who dropped out did so later in their college career, after over 48 hours versus after less than 12, and worked more hours. The students in this study were capable of college-level work, but felt the demands of their families were more important than continuing their college careers.

Two types of institutional experiences have been found to affect students' social integration and influence their persistence at the college level: residence status and participation in extracurricular activities (Christie and Dinham, 1992). Students who lived in the residence halls felt more accepted by their peers and were more integrated into the campus life. Commuter students felt isolated, less accepted and less informed about college activities and information. However, involvement in extracurricular activities influenced social integration in much the same way as living within the residence halls. Christie and Dinham (1992) also found that proximity to high school friends and family influenced persistence levels of college students. Students with high school friends who also valued and were enrolled in higher education institutions were much more likely to persist than those whose friends did not value higher education. Students who interacted with high school friends not attending college had the most negative effects on the students' adjustment to college. Well-adjusted students were in the process of relinquishing their dependence on families to the independence of being in college. However, families maintained a great deal of influence over the college-enrolled students, including influencing their decisions to persist.

Smedley, Myers and Harrell (1993) conducted a study to determine if stresses encountered by minority students increase the risk of poor adjustment to the college experience. The study was conducted at a largely white university. Students were given three surveys as part of the study: Life Events for College students, Current Concerns Scale, and the Minority Student Stress Scale, which was designed specifically for the study. The results confirmed the hypothesis that stresses encountered by minority students hinder their adjustment to the college environment. However, psychological stresses were not as important as academic preparedness with regard to academic performance. Helping minority students identify and be aware of the additional stresses of the collegiate environment may be the key to improving minority retention.

The way Latino students view a campus and their educational outcomes varies substantially by characteristics that are often neglected in studies concerning college students (Hurtado, 1994). This 1994 study examined student background characteristics, general measures of the campus climate, and student behaviors in order to understand how high-achieving Latino students perceive an institution's receptiveness of their presence on the campus. A national sample of high-achieving Latino students was selected for the study and researchers attempted to collect information regarding their SAT scores, the Student Descriptive Questionnaire (SDQ), given the same day as the SAT, and the National Survey of Hispanic Students (NSHS). Information from the SAT and SDQ was collected from 94% of the sample and approximately 49% returned the NSHS. The Latino students in this study reported high levels of interaction between differing ethnic/racial groups. The students cited good communication between groups and experiences of informal interaction with someone

of a different race/ethnicity (62%). However, about one in four reported distrust between ethnic groups and racial tension on campus. Although the students in the study were high-achieving Latino students with a high potential for student success, 29% reported feeling as if they did “not fit in” on the campus. A smaller percentage (13-18%) cited they felt excluded from activities, faced direct insults due to their heritage, felt white students have more access to faculty or have heard faculty make inappropriate comments concerning minority students. Students within the study who perceived inequalities for Hispanics in society in general tended to report racial tension on campus or other discrimination. College characteristics also influenced whether students tended to report a hostile environment. Latino students at larger campuses, highly selective colleges, or in small college towns were more likely to report racial tension on campus. Meanwhile, Latino students at colleges with high Hispanic undergraduate enrollments were less likely to report feelings of racial tension. In addition, on campuses where students felt that the campus administration was open to them, that faculty cared about students, and that other students understood the Hispanic culture, Latino students were less likely to report feelings of racial tension. Hurtado (1994) encouraged campuses to strive to understand their own Latino students’ experiences in order to better develop strategies to improve student outcomes. Conducting research in the dimensions of these student groups on their own campuses is the first step to understanding the problems their students face.

Padilla, Trevino, Gonzalez and Trevino (1997) employed Padilla’s expertise model (1991) to develop a local model of successful minority students. They conducted their research at a large research university in the southwest and sought to identify

specific campus knowledge that minority students needed to know and act upon to be successful. Sophomore, juniors and seniors of Latino, African American, Asian American, or American Indian ethnicity were included in the study. Freshmen were not considered because their accumulation of heuristic knowledge was only just beginning. Four categories of barriers were discovered on the campus: discontinuity barriers, lack-of-nurturing barriers, lack-of-presence barriers and resource barriers. Discontinuity barriers were those barriers that hindered students' transition from high school into college. These barriers were defeated when the students successfully adjusted to their new college environment. Lack-of-nurturing barriers consisted of absence of support resources on campus. Successful students learned how to nurture themselves or created their own nurturing environments by creating a family-like environment or by involving their own families, joining student organizations, seeking out a nurturing friend or by using resources such as faculty and advisors. Lack-of-presence barriers were those surrounding the lack of other minorities in the program or general student population. Successful students sought out the minority students in the population. The final barrier identified, the resource barrier, related to lack of money and difficulties with the financial aid system. Successful minority students learned to work the process, learned who were experts to contact and completed their financial aid forms early. Developing a local model of minority student barriers allowed the campus officials to determine which supports that aid in college transition were lacking for minority students on their campus. Once the missing heuristic knowledge was identified, administrators were better able to inform continuing and incoming students of the information they needed to be successful at that particular college.

Hernandez (2000) conducted a study of 10 successful Hispanic college students to determine what encouraged them to persist to graduation. His research addressed three questions: “1) What factors influenced the retention and graduation of Latino college students; 2) In what ways, if any, did the environment influence the experience and ultimately the retention of Latino college students; and 3) What meaning did students give to these factors and how was this meaning used in their decision to persist in college?” (p. 576). From the results, eleven categories or themes emerged that impacted the retention of the Latino students. First was the belief and realization that they could succeed in college. Secondly, family was reported to play an important role on success – both by encouragement from family to complete their degree and because of fear of disappointment to the family if they did not graduate. Thirdly, friends and peers played an important role in encouraging success as well. The fourth theme was support from faculty and staff. Involvement in co-curricular organizations was the fifth theme. Meeting other students of Latino descent on the mostly white campus provided the sixth category that led to success toward graduation. Finances were said to play a role in retention, either positively or negatively, by all students. Some found finances a stressor as they struggled to come up with the funding to continue while others found through financial aid and scholarships that money was not a barrier. Students all agreed it was up to them to make the best of the eighth category, “the environment.” All students agreed that there were services available and it was up to the individual students to seek out the services and utilize them. People within the campus were also reported to shape the experience, again either positively or negatively. Students reported that the people within the campus actually affected their

thoughts about the campus more so than the environment itself. Personal experiences with the physical environment shaped the perceptions of the students as well. This category centered on the student's experience with a particular building or class. Students, however, did not let the isolated experience affect their perception about the campus in its entirety, but instead kept the experience and related feelings isolated to that particular building or area of campus. The final category was involvement with organizations. Students reported that joining various campus organizations was a way to break down the large size of the campus and to make it feel smaller and more welcome.

Niemann, Romero, and Arbona (2000) studied Hispanic students and their desire to obtain a college degree in relation to cultural orientation and perceived conflict with relationships. Niemann et al. (2000) made the assumption that Hispanic students are led, culturally, to desire and participate in endogamy – the inclination to marry within their own culture. Within this study, students measuring high in “ethnic loyalty” did adhere to the principle of endogamy. Women more than men saw education as a barrier to meeting the goal of endogamy as did students from low socio-economic groups. Those with high “ethnic loyalty” scores also believed that if they pursued a higher education, those in their communities would see them as an elitist. From this study, the researchers drew conclusions relating to barriers of students desiring higher education. Students with high “ethnic loyalty” or low socio-economic status saw higher education as a means to alienate them from their own communities, thus discouraging their pursuit of higher educational degrees.

The effects of diversity on overall satisfaction with the college campus were the subject of a study conducted by Helm, Sedlacek, and Prieto (1998). The particular campus studied utilized many diversity initiatives. Eleven factors influencing students' satisfaction were identified by the researchers: racial tension, cross-cultural comfort, diversity awareness, racial pressures, residence hall tension, fair treatment, faculty racism, respect for other cultures, lack of support, comfort with own culture, and overall satisfaction. Fair treatment from peers and faculty had the highest correlation with satisfaction for all groups, and respect for other cultures was also positively correlated with satisfaction. For Hispanic Americans, comfort in cross-cultural situations was rated higher than for any other group. Level of comfort with own culture was also found to positively correlate with satisfaction for Hispanic students. On the reverse side, the more Hispanic students were aware of diversity and required to change their behavior because of it, the less satisfied they were. Lack of support was also seen to be related to dissatisfaction by all student groups. While all groups answered that race-related issues made them uncomfortable, Hispanic students reported that encountering racist faculty, in or out of class, did not significantly alter their satisfaction level one way or another.

Salinas and Llanes (2003) studied the 1992 cohort of freshmen students at the University of Texas – Pan American (UTPA). This cohort, which was 91.5% Hispanic, was tracked for six years to determine persistence of this group of students. The researchers broke the students into five groups: persisters, those students who stayed enrolled but had not graduated after six years; non-persisters, those students who had not received degrees after six years from UTPA or any other institution of higher

education; UTPA graduates; community college graduates, those students who had completed a degree at a community college; and transfer graduates, those students who had graduated from another institution of higher education after six year. Students were compared by ACT/ SAT composite scores, Texas Academic Skills Program (TASP) scored, high school rank, college grade point average, academic standing, financial aid received, and semester attendance. The results of the study provided indicators which can be used to determine the potential dropping-out or transfer behavior. Based on Tinto's model of student persistence, UTPA students had difficulty with the separation phase due to the lack of separation from family and friends; lack of transition, due to the fact that students, being commuters mostly, never got involved with on-campus activities; and lack of incorporation, due to lack of modeling or norms and practices of college experiences by family who have never attended school.

Jones et al. (2002) examined the experiences of minority students at a predominantly white institution and their perspectives on the campus climate and resources made available to them. The researchers conducted focus group interviews amongst the different ethnicities making up the student body. These students were volunteers recruited from the campus cultural center. Due to the fact that these students were involved in the cultural center, availability of a cultural center on campus became a topic of many of the students' statements. Students reported a lack of support for diversity on campus and a lack of diversity on campus. Hispanic students felt they encounter "blatant racism" on campus (p. 28). The cultural center was seen as a haven for ethnic minority students. It was also believed by the students that the cultural center was thought of by the administration as their answer to diversity issues and the staff

there were solely responsible for diversity programming on campus. All groups credited the cultural center as a contributor in their retention. The finding of this study promoted the need for social experiences on campus that acknowledges racial differences. It also highlighted the benefits of a cultural center in enhancing the experience of ethnic minorities on a predominantly white campus. The researchers closed by suggesting that administrators, staff, faculty and students collaborate to explore the needs and expectations of their minority students. Opportunities to discuss and promote diversity efforts among all the constituents should be addressed and made available.

Effects of Student Culture on Collegial Development

Student cultures have been credited with affecting students' collegial learning atmospheres. While the importance of faculty has been documented (Helm et al., 1998; Hernandez, 2000; Hurtado, 1994; Hurtado et al., 1996; Mayo, Murgula, & Padilla, 1995; Nora & Cabrera, 1996), in some cases student culture outweighed the effect of the faculty on student integration and persistence at the collegial level (Wallace, 1966). Students chose to participate with their own cultures in order to feel safe from academic and society's negative influences (Mendez-Catlin, 1995). Boyer (1990) insisted that institutional planning which takes into account the student cultures that exist within the campus would provide for a sense of community campus-wide. For the most part, research has been conducted on culture in general and not specifically the Hispanic student culture. Student cultures have an effect on the campus environment and the effect of ethnic cultures on the students at the institution provides useful information for student affairs practitioners (Mendez-Catlin, 1995). Awareness of the Hispanic culture

specifically will help institutions of higher education as they seek to identify and implement plans to increase the success and persistence of this growing student group.

In 1995, Lois Marie Mendez-Catlin selected the Hispanic student culture at New Mexico Highlands University as the subject of study for her doctoral dissertation. In her study, Mendez-Catlin moved with her young son to the campus in Las Vegas, New Mexico to better study the Hispanic undergraduate students and their culture at the college. The purpose of the study was to identify and describe the student culture at a predominantly Hispanic institution of higher education. Mendez-Catlin gathered information from the students by way of questionnaires, reviews of college records, focus groups interviews, observations, the Interpersonal Environment Scale (IES) and results from the National Cooperative Institutional Research Program Freshmen Study.

Through her study, Mendez-Catlin found that Hispanic students at New Mexico Highlands University formed peer groups that matched the definition of culture defined in her study. Peer groups were formed based on several influential factors: race, ethnicity, culture, residence, class standing, geographic region, athletic groups and academic groups. First-year students formed a peer group to assist with rites of passage leading to their socialization within the college. Upper division students formed peer groups as a means to simulate a familial atmosphere and to increase their own confidence and self-esteem. The peer groups had an influence over the behavior of its members and their integration and satisfaction with the university environment. Peer groups' recommendations were seen as valuable to the students in regard to academic decisions and often served to refer students to the right places/people for academic assistance. Relationships with their families and the institutional environment also

influenced the students' comfort level at the college. An internal system of rewards and punishments existed within the Hispanic student culture and affected the behaviors of the students within their culture either positively or negatively. The student culture perpetuated itself by way of students passing down norms and values from existing members to the next group entering the college. Specifically, the Hispanic students at New Mexico Highlands University reported that finances were their number one source of stress and that their families were guiding influences. The Hispanic students in the study were predominantly first generation college students. Value was placed on personalities and not possessions or status.

Hispanic Students and Financial Aid

Financial aid is another resource that has been studied in relation to student persistence (Hernandez, 2000; Hu & St. John, 2001; Kaltenbaugh, St. John, & Starkey, 1999; Oliver, Rodriguez, & Mikelson, 1985; Padilla et al., 1997; St. John, 1991; St. John & Noell, 1989; St. John, Paulsen, & Starkey, 1996). Research has indicated that minorities are influenced more by college tuition price and are less likely to subscribe to student loans (Kaltenbaugh, St. John, & Starkey, 1999; St. John, 1991; St. John & Noell, 1989). Tuition has been found to be negatively associated with student persistence and to be negatively associated with a greater extent for African American students than European students. (Kaltenbaugh, St. John, & Starkey, 1999). Oliver et al. (1985) reported that finances were a stressor for Chicano students and increased financial aid produced a greater bond with the institution for these students.

The effects of financial aid on student college enrollment behavior were studied by controlling for other factors associated with college attendance (St. John & Noell,

1989). The study examined the enrollment trends of students between the early 1970's and the early 1980's and the type of aid offered to the students. St. John and Noell found that all types of aid were effective in promoting access for minority students and all forms of student aid influenced decisions to attend college. The packaging of aid for minority students was significant as well. The researcher found that certain types of aid, when packaged alone, affected students' enrollment decisions. For instance, for Hispanic students, only grants packages influenced attendance in certain years under examination. Likewise, loans only, in some instances, detracted from the possibility that students would enroll. These findings indicate that the type of aid package should be considered and that multiple types of aid packaged together were more influential on enrollment decisions.

Conclusions concerning the way prices affect persistence were introduced in the study by St. John, Andrieu, Oescher and Starkey (1994). Researchers found that tuition and the amount and type of financial aid had a substantial direct effect on within year persistence. Researchers suggested the findings implied that higher tuition costs would increase the length of time necessary for a student to complete the degree. Other results found that loans as the only form of aid and the amount of loans received were negatively associated with persistence.

A study by St. John et al. (1996) examined a set of financially based college-choice variables and their role in students' choices of college and their decision to stay enrolled. The study had three findings that were significant to universities as they seek to assist the college-choice and persistence of students: finances played an important part in persistence, even some high-achieving students dropped out, and college costs

had a direct effect on persistence. Although other factors appeared, costs had a significant effect on even high achieving students and their decision to persist. It was also found that the interaction between finances and the students' experiences played a significant part in the perception of the costs/benefits of staying in college.

Heller (1999) conducted a study examining public tuition pricing and its relation to undergraduate enrollment. The study examined the effects of cost on enrollment at community colleges, four-year institutions and higher education institutions in general. Hispanic students showed a high sensitivity to tuition increases at the community college level. Basically, for every \$1000 increase in tuition, Hispanic enrollment dropped five percentage points. The same sensitivity was not found at the four-year institution level, but this was attributed to the fact that most Hispanic students enter the community college first. Thus, they would be more sensitive to tuition rates there. Enrollment of all races studied (blacks, Asian Americans, Hispanics and whites) was positively influenced by increases in state grant appropriations. Hispanic, black and Asian American enrollments also had a significant reaction to unemployment whereas white students, while they did show an increase in enrollment during times of high unemployment, were not found to have significant results. Finally, the enrollment of all three minority groups responded more to changes in state grant appropriations than did the white students.

Hu & St. John (2001) examined the effects of financial aid in the persistence of three ethnic groups – African Americans, Hispanics, and whites. For the purpose of this study, only the Hispanic results are specifically reported. Overall, the Hispanic persistence rate decreased 6.2% over the six years in the study. During this same time,

Hispanic students who did not receive aid increased overall by 5.1%. Financial aid for Hispanic students saw a decline in the number receiving grants only and an increase of students receiving loans only or a combination of loans and grants. Overall, the receipt of any type of financial aid was significantly and positively correlated with persistence. Also, for those students who did not receive aid, tuition increases negatively affected their persistence. From other factors included in the study, older students and students with grades of C or below were less likely to persist. Upperclassmen were more likely to persist than freshmen in all years studied.

Effects on Grade Point Average

The effect of social integration on grade point average in college was studied by Mayo et al. (1995). After conducting a telephone questionnaire, Mayo, et al. (1995) found that formal social integration, defined as involvement in organizations or interaction with faculty, had a greater and more consistent effect on grade point average than did informal social integration, defined as involvement in the “social life” on campus. Regarding formal social integration, having faculty role models and joining Hispanic organizations were related to higher grade point averages for Hispanic college students. However, involvement in informal social integration through the college “social life” had a negative effect on Hispanic students’ grades. Another finding was that while all minority groups studied encountered effects on grade point average through social integration, there was enough difference between the groups that each should be considered separately. A further question for study also emerged: does organizational membership actually affect grade point average, or do the more talented students actually take advantage of campus organizations?

Academic Major Selection

Other studies have been conducted regarding academic major and associated with student persistence. McJamerson (1992) examined science and technical fields and investigated the student population distribution across these fields, the persistence difference between majors by student ethnicity, and the persistence rates of differing ethnicities as related to major. His findings showed that the majority of students were majoring in the fields of liberal arts, engineering, and business administration. Amongst these three areas, Hispanic students were most highly concentrated in engineering and liberal arts. They also found that there were gender differences amongst the majors as well. Hispanic males were the leading group, percentage-wise, entering the engineering fields, while Hispanic females focused more on business, medicine or teaching degrees. However, the Hispanic female representation in educational fields was lower than that of white females. McJamerson also found that persistence varied widely based on gender as well. While Hispanic females did enter the education major, they did not persist. These findings emphasize the increasing need for Hispanic teachers, yet they had a somewhat less than average showing in the discipline. Although there was a statistically significant relationship between academic major and persistence, gender was an additional factor superceding race/ethnicity (p. 47).

Rendon and Valadez (1993) found that parental influence was particularly strong when related to choice of major. Hispanic females were not necessarily discouraged from going to college, but parents exerted their influence over their choice of majors. Hispanic males were urged by family members to seek majors that would lead to immediate work possibilities.

Simpson (2001) found the factors in her study did not differentiate significantly between ethnicities and their choice of major. Academic preparation was one factor leading to choice of major. In general, the more mathematics courses taken by students in high school, the more likely the students were to select a technical major in college. This is slightly stronger in the case of white students. Likewise, the more science courses completed by the students in high school, the more likely the students were to choose technical majors. Surprising to the researcher was the effect of private schooling on choice of major. Students who attended a private high school were more likely to major in non-technical fields, whereas those attending private colleges were more likely to select technical field majors. Focusing on the differences between ethnic groups when it comes to choice of major, the researcher reported this study did not support previous research that reported differences in choice between ethnic groups.

CHAPTER 3

PROCEDURES FOR THE COLLECTION AND ANALYSIS OF DATA

Introduction

Educators are encouraged to strive to understand their student body, including their students of diverse backgrounds, in order to develop institutional strategies to improve student outcomes (Hurtado, 1994). As the Hispanic population increases in states such as Texas, colleges and universities will benefit from conducting in-depth studies to better understand their own Hispanic students. The following study collected data that addressed the research questions and adds to the body of knowledge the University of North Texas has about its own Hispanic students.

The purposes of this study were to:

- 1) determine the geographic origins of the undergraduate Hispanic students at the University of North Texas in terms of location of educational institution attended prior to matriculation;
- 2) determine whether the students enter as freshmen or transfer from other higher education institutions;
- 3) determine the gender composition of undergraduate Hispanic students at UNT;
- 4) report the highest level of education achieved by parents of undergraduate Hispanic students at the University of North Texas;

- 5) explore patterns in academic major selection among undergraduate Hispanic students at UNT and what/who influenced their choice of major;
- 6) ascertain the percentage of undergraduate Hispanic students who plan to use financial aid for educational purposes;
- 7) examine graduation rates among undergraduate Hispanic students at the University of North Texas;
- 8) determine who is most influential in the academic decisions made by Hispanic undergraduate students at UNT;
- 9) discover what type of emotional support is given to Hispanic students pertaining to college enrollment;
- 10) establish why Hispanic undergraduate students elect to attend UNT;
- 11) discover what factors prohibit new undergraduate Hispanic students at UNT from graduating.

This chapter is organized to address the following topics: research questions, definitions of terms, limitations, delimitations, assumptions, research design, subjects, instrumentation, pilot study, procedures for data collection and procedures for the analysis of data.

Research Questions

This study addressed the following research questions:

- 1) What geographic regions of Texas produce the most Hispanic students who matriculate at UNT?
- 2) What are the percentages of Hispanic students at the University of North Texas who are true freshmen versus transfer students?

- 3) What is the gender composition of undergraduate Hispanic students at the University of North Texas?
- 4) What is the highest level of education achieved by parents of undergraduate Hispanic students at the University of North Texas?
- 5) What majors are most selected by undergraduate Hispanic students at the University of North Texas and what/who influenced that choice?
- 6) What percentage of undergraduate Hispanic students plan to use financial aid at the University of North Texas and report lack of financial aid as a barrier to their academic completion?
- 7) What is the six-year graduation rate of Texas undergraduate Hispanic students at the University of North Texas?
- 8) Who is most influential in the academic decisions made by undergraduate Hispanic students at the University of North Texas?
- 9) What types of emotional support are given by family members of undergraduate Hispanic students concerning their plans to attend and succeed in college?
- 10) Why did enrolled undergraduate Hispanic students choose to attend the University of North Texas?
- 11) What do new Hispanic students think keeps them from graduating from the University of North Texas?

Definition of Terms

Hispanic describes Spanish surnamed individuals but does not designate race.

(Marin & Marin, 1991).

Latino/Latina commonly refers to individuals of Puerto Rican, Cuban and Central American decent (Castex, 1990).

Geographic origins as used in this study referred to the physical locations of the educational institutions last attended by the students.

Graduation rates referred to the percentage of students graduating within six years.

Educational records included academic and demographic information collected by the University of North Texas and maintained within the Student Information Management System (SIMS).

Limitations

1. Results depended on information provided by students on the survey instrument. Information for this study can only be as thorough as the information provided by the answers submitted.
2. Results of the research are an artifact of the honesty of responses of survey participants.

Delimitations

1. Single institution design restricts the ability to generalize findings to other institutions outside the institution in this study.
2. The study was limited to only those students who completed the survey instrument during Spring Academic Orientations conducted in January 2003. The spring semester is traditionally a highly populated transfer student semester, which limits the ability to generalize the findings from the spring semester to students enrolling throughout the entire year.

Assumptions

To correctly evaluate the information from this study, a couple of assumptions were considered to be valid.

1. The students supplying information did so truthfully and disclosed the information in its entirety.
2. Data collected represent the students' realistic perceptions and intents.

Research Design

The research design used in this study employed two separate data collection procedures. First, data were collected from university reports generated by the University of North Texas. The reports are standard computerized reports generated each semester and provided information concerning students' academic level at time of enrollment: freshman versus transfer student. The report also provided information concerning the students' geographic origin at the time of enrollment. Data collection from these existing reports allowed data to be collected from the fall 2002, which was more representative of the UNT student body than the spring, primarily considered a "transfer student" semester. Using the fall report provided for ease of data collection and the ability to tally data from a more representative population.

The second procedure utilized a non-experimental, survey methodology. The survey was distributed during an orientation meeting to the pool of potential subjects and collected data concerning the subjects' family background, academic decision-making, external support and the potential educational barriers. Dissemination of the survey at orientation allowed for instantaneous collection of data since the subjects were able to return the survey immediately thus increasing return rate possibilities. It

also saved the expense of mailing and uncertainty of the survey response. The survey was distributed over the course of three days and each subject pool was given the opportunity to complete and return the survey the same day. Measures were taken to protect the confidentiality of the subjects returning the survey: names were not recorded or requested, students were not required to complete and return the survey, surveys were collected together and not held separate by return date.

Subjects

Subjects for the study consisted of two groups: live subjects and computer generated records of currently enrolled student. Live subjects consisted of all new undergraduate students, both freshmen and transfer of all ethnicities, enrolled in the University of North Texas for the spring 2003 and attending spring 2003 Academic Orientation. Attendance at Academic Orientations is mandatory for all new undergraduate students at the University of North Texas and thus provided the opportunity to supply each subject with a copy of the survey instrument. This convenience sample included approximately 1300 new undergraduate students. Within this subject group was the sub-sample of Hispanic students used for this particular study. By providing surveys to the entire population, the researcher was able to collect information for the Hispanic sample without singling out that particular group from all others and possibly skewing the survey response.

Computer generated records of currently enrolled students consisted of undergraduate Hispanic student educational records kept within the University of North Texas Student Information Management System (SIMS) for the fall 2002 semester. Demographic and enrollment data are collected by way of the student information

system for each academic semester. Reports of these data are available by request from the UNT computing center. Specific reports used for this study were reports requested by the Office of Admission and provided for that office each semester. Confidentiality was assured by the principal researcher and thus Family Educational Rights and Privacy Act of 1974 (FERPA) was maintained.

Instrument

The New-Student Survey used in this study was an abbreviated survey version of the student survey used by Lois Mendez-Caitlin in her research at New Mexico Highlands University (1995). The original survey was developed by Lois Mendez-Caitlin specific for her study of the Hispanic student culture at New Mexico Highlands University in Las Vegas, New Mexico. Consisting of 23 total questions, the survey questions included for this study were those pertaining to the purposes of the study outlined in Chapter I. Demographic information was collected in the heading section of the survey versus within the body of the survey itself. The questions included in the survey for this study can be divided into several topics: family educational experience, family involvement and influence, students' academic goals and intentions, financial responsibilities, requirements to enroll and complete education, and comfort level with situations at UNT. The adapted survey is included in its entirety in Appendix A.

The survey consisted of 23 questions related to various research questions posed by the researcher. The survey began with some demographic questions to better describe the population in the study. The first survey questions dealt with the educational attainment and academic emotional support provided by the subjects' families. Next, the subjects' academic major selections and educational goals were

obtained. Questions concerning the subjects' need and potential to use financial aid followed. The decision making process of the subjects was the topic of four questions delving into who influenced life decisions, decisions to attend UNT and why the subject chose to attend UNT. Educational barriers were investigated through questions asking subjects about UNT's ability to meet their needs and expectations, their intention to graduate from UNT and what would prevent their graduation from UNT. Ties to family and friends were measured through various questions concerning the subjects' decision about where to live. Finally, a question collected information on the subjects' comfort level in carrying out various college exercises during their enrollment at UNT.

The final version of the survey was approved by the researcher's doctoral committee and submitted to and approved by the University of North Texas Institutional Research Board (IRB). Committee members reviewed the survey to assure that the survey would collect the data outlined by the research questions of this study. The UNT Institutional Research Board reviewed the instrument to assure the protection of the subjects from harm; either physical or psychological. The IRB determined the survey to be appropriate for use with human subjects and gave its permission to use the instrument on campus.

Only questions relating to the purposes of this study were addressed. Likewise, completed surveys were collected from a sample of all new students attending the spring 2003 orientations, but according to the proposal approved by the doctoral committee. Only those surveys completed by students identifying themselves as Hispanic were used in the analysis of data.

Pilot Study

A pilot study was conducted to determine the clarity of the survey questions and its appropriateness for answering the research questions in Chapter I. The students used in the pilot study were student assistants from the offices in the Eagle Student Services Center at the University of North Texas selected as a convenience sample (N=13). Subjects were asked to complete the survey, note the time needed to complete all the questions and identify questions that were unclear. The subjects responded that the time needed to complete the survey ranged from 2 minutes to 11 minutes. Some suggestions were made on clarification of wording and minor changes were made to meet suggestions. The finding of the pilot study was that with minor grammatical changes, the survey was usable for the study and for collecting the data needed to address the research questions.

Procedure for Data Collection

Data for the study were collected in two parts. Educational records were used to collect information on the undergraduate Hispanic students from the fall of 2002. Using the Student Information Management System (SIMS), data were collected concerning the geographic origins of the students' prior educational institution, their gender composition and their level of educational attainment, be it freshmen level or a transfer student, when the students entered the university. Data were collected from Report P600-525 provided by the UNT computing center. Selected data needed for this study were gleaned from report P600-525 and organized by the researcher in an excel spreadsheet.

The second part of data collection consisted of a study instrument that was distributed to all undergraduate students attending the academic orientation programs at the University of North Texas for the spring 2003. This particular instrument was reviewed and approved by the UNT Institutional Research Board. The researcher worked with staff in the Mentoring and New Student Programming Office for permission to distribute the surveys at the orientation sessions. Students were given the survey at the time of their arrival to the orientation session and were asked to complete the survey during the morning opening session in the university Main Auditorium. Orientation leaders collected the completed surveys as the students left the Main Auditorium after the opening session was completed. The surveys were distributed at all three orientation sessions for the spring 2003 semester.

Procedures for the Analysis of Data

Quantitative data were collected and assessed from the study. Data from the SIMS reports and the survey instrument were tabulated numerically and categorized according to the various distributions identified in the research questions. From the SIMS student record reports, frequency counts and percentages were used to report the data collected concerning the geographic region of residence, the gender composition and the classification level of the subjects.

To determine the geographic regions of Texas producing the most Hispanic students matriculating at UNT, the new Hispanic students were identified and the hometown of each student was identified and recorded. The fall Hispanic students' hometowns were identified from UNT admission report P600-525; the spring Hispanic students' hometowns were collected on the new-student survey instrument. The

hometowns were then reported by county to identify specific regions of Texas from which the UNT undergraduate Hispanic students matriculate. The regions are reported by metropolitan statistical area (MSA) of origin as provided by the Texas State Data Center and the Office of the State Demographer (2003). For those counties not represented by a MSA, the researcher placed the student count in the nearest MSA for the county from which the students originated.

To collect freshmen versus transfer student data, the fall 2002 new students' classifications were collected from SIMS report P600-525. The spring 2003 new students' classifications were determined from the completed new-student surveys returned at the spring 2003 orientations. The two sets of data were combined to come up with the overall number of freshmen and transfer Hispanic students for the 2002-2003 academic year.

Gender data were collected from those answering that particular question on the new-student survey. The data for research question four were gathered from those answering the survey item concerning mother and father's educational achievement.

Information provided by the University of North Texas Office of Institutional Research was used to determine the continuation and graduation rate of undergraduate Hispanic students. The undergraduate Hispanic students entering UNT the fall of 1995 and 1996 were used to determine these figures since only these two cohorts have actually reached the point to be able to complete six years at UNT. Graduation rates were gleaned from informational reports supplied to the researcher by the UNT Institutional Research Office comparing new Hispanic students from the fall 1995 and 1996 to the number of those same students who have graduated by the fall of 2002.

Retention rates were determined through data provided on reports from the UNT Institutional Research Office tracking the new Hispanic students from the fall 1995 and 1996 through their continuing enrollment in the following semesters. To determine how the undergraduate Hispanic students fare in their persistence and graduation, this study compared the undergraduate Hispanic student continuation and graduation rates with those of the entire UNT undergraduate population. Only by comparing the specific Hispanic student continuation and graduation rate to the whole could a determination be made about the Hispanic students relation to the norm.

A total of 932 usable surveys were returned out of the 1262 surveys distributed to subjects attending the spring 2003 academic orientations. A response rate of 73.85% was achieved. This response rate does not include 93 surveys excluded due to the lack of response to the ethnicity question and 4 surveys excluded due to a majority of the survey being left blank. Of the 932 surveys returned, 96 surveys were returned by students identifying themselves as Hispanic on the ethnicity question. The 96 responses collected represented 58.54% of the total 164 new undergraduate Hispanic students enrolled for the spring 2003 semester. These surveys were used to collect the data needed for analysis of the research questions in the study.

The data were read from the survey and entered into a Microsoft Access format by the principal researcher. Data entry was spot checked multiple times by the researcher to ensure accuracy. The data file was then converted into Excel and SPSS formats for the analysis of data procedure.

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 11.0 for Windows and Microsoft's spreadsheet software Excel and Access

version 2000. Data gathered from the SIMS reports were analyzed for descriptive purposes using frequency counts and percentages. Data from the survey instrument were analyzed using frequency counts, percentage distributions, chi-square, and chi-square goodness of fit tests. The benefit of using chi-square for goodness of fit was that it provided a quantitative test of discrepancies between actual and theoretical distributions. In this study, the expected theoretical values were assumed to align with an hypothesis of no difference. Significant chi-square values determined that differences between actual and theoretical values are not random. Chi-square and chi-square goodness of fit statistics were performed at .05 alpha levels.

CHAPTER 4

PRESENTATION OF THE FINDINGS

Introduction

The purpose of this study was to identify pre- and post-matriculation characteristics and demographic trends among undergraduate Hispanic students at the University of North Texas. A new-student survey was distributed to all new undergraduate students attending the spring 2003 orientation in January 2003. All new undergraduate students are required to attend an orientation session prior to registration. The choice of this sample was due in part to the convenience of reaching the particular group of interest, viz., undergraduate Hispanic students. By surveying the entire new undergraduate student population, the researcher was able to collect the data desired without the response effects of singling out a specific population, viz., sampling error. A total of 1262 surveys was distributed, of which 932 were returned. The response rate was 73.85%. To access data pertaining to the actual purposes of this study, the returned surveys were examined and only those surveys completed by students identifying themselves as Hispanic (N=96) were used in the analysis of data. This return represented 58.54% of the new Hispanic students enrolled for spring 2003. The use of the new student orientation was expected to provide the best access to all the new undergraduate Hispanic students attending UNT beginning the spring 2003 semester. However, some new undergraduate Hispanic students were unintentionally excluded from the potential sample. All students are expected to attend the orientation

sessions prior to registration, but it is common knowledge that some students find a way around that requirement. Not all students completed the survey and some of those completing the survey left the “ethnicity” question blank making it necessary to exclude those surveys.

This chapter presents the data and the statistical analyses pertaining to the research questions posed in Chapter I. The findings are presented in outline form by addressing each of the research questions one-by-one, presenting the statistical results for each question and then discussing the results. All statistical analyses were performed at the .05 alpha level. The N in the following tables does not necessarily equate to the N of the study (N=96) because not all respondents answered every item on the survey.

Research Question 1

What geographic regions of Texas produce the most Hispanic students who matriculate at UNT?

For this question, both fall 2002 and spring 2003 new Hispanic undergraduate students were included in the survey. First, the students’ home states were identified and listed for comparison (Table 1). The data set included 722 undergraduate Hispanic students whose information was derived from SIMS report P600-525. The largest group of students (N=692) came from within Texas. This group made up 95.84% of the total sample. The next highest number of students (N=5) was from Oklahoma, then California (N=4).

Table 1

Undergraduate Hispanic Students' States of Origin

State	Frequency	Percentage
Alabama	1	.13
Arkansas	2	.28
California	4	.55
Florida	3	.42
Georgia	1	.13
Hawaii	1	.13
Iowa	1	.13
Indiana	1	.13
Massachusetts	1	.13
Maryland	1	.13
Michigan	2	.28
New Mexico	3	.42
New York	1	.13
Oklahoma	5	.69
Texas	692	95.84
Tennessee	1	.13
Washington	1	.13
Mexico	1	.13
Totals	722	100.00

Table 2

Undergraduate Hispanic Students' Geographic Regions of Origin by Texas Metropolitan Statistical Areas

MSA	Frequency	Percent
Abilene	4	.58
Amarillo	7	1.01
Austin	16	2.31
Beaumont/Port Arthur	2	.29
Brazoria	4	.58
Brownsville/Harlingen/San Benito	15	2.17
Bryan/College Station	3	.43
Corpus Christi	10	1.45
Dallas	336	48.55
El Paso	18	2.60
Fort Worth/Arlington	116	16.76
Galveston	6	.87
Houston	33	4.77
Killeen/Temple	9	1.30
Laredo	7	1.01
Longview/Marshall	3	.43
Lubbock	9	1.30
McAllen/Edinburg/Mission	20	2.89
Midland/Odessa	21	3.03
San Angelo	3	.43
San Antonio	33	4.77
Sherman/Denison	1	.14
Texarkana	2	.29
Tyler	1	.14
Victoria	0	0
Waco	3	.43
Wichita Falls	10	1.45
Totals	692	100.00

A total of 692 students reported originating from the state of Texas. Twenty-seven MSAs are designated within the state of Texas and the new Hispanic students enrolling at UNT represent twenty-six of these MSAs. No students from the Victoria MSA enrolled at UNT. Of the group of new Hispanic students reported, 41 students came from counties that did not fit into a designated MSA [Andrews (N=1), Bee (N=1), Brooks (N=1), Cooke (N=7), Crane (N=1), Crockett (N=1), Eastland (N=1), Franklin (N=1), Gray (N=1), Hale (N=2), Hockley (N=1), Matagorda (N=1), Nacogdoches (N=2), Navarro (N=5), Nolan (N=1), Pecos (N=1), Scurry (N=1), Terry (N=1), Val Verde (N=2), Washington (N=1), Wharton (N=1), Willbarger (N=2), Wise (N=2), Yoakum (N=2), and Young (N=1)]. For this group, the researcher assigned students to the MSA closest to their county.

Of the 692 new undergraduate Hispanic students reported to be from Texas, 48.55% (N=336) were from the Dallas MSA. The second highest number of students, 16.76% (N=116), came from the Fort Worth/Arlington MSA. These two MSAs equal 65.32% of the total. The remaining MSAs, outside these two areas, included 33 students total or less.

Research Question 2

What percentage of undergraduate Hispanic students at the University of North Texas are true freshmen versus transfer students?

The data for this research question were obtained both from SIMS report P600-525, for the fall 2002 semester, and from the surveys returned from the spring 2003 semester students. The results are shown separately, and then combined in Table 4 for the academic year.

Table 3

Fall 2002 Undergraduate Hispanic Students' Classification

Student Type	Observed N	Expected N	Percent
Freshman	375	317.5	59.1
Transfer	260	317.5	40.9
Total	635	635	100.0

$\chi^2 = 20.82^*$

For the fall 2002 semester, a total of 635 new undergraduate Hispanic students enrolled at UNT. This information was extracted from the SIMS report R600-525. Of these students, 59.1% (N=375) were first time freshmen.

Under the condition of the null hypothesis of no difference, the expected N in each of the two categories would equal 317.5 each. The chi-square value, $\chi^2 (1, N=635) = 20.82$, $p = .05$, differed significantly from the critical value of chi-square with one degree of freedom. Since the chi-square value exceeded that of the critical value, the difference between the observed N and the expected N cannot be attributed to chance. Therefore, the null hypothesis was rejected.

A total of 96 new undergraduate Hispanic students completed the new-student survey distributed at the spring 2003 academic orientations. The results appear in Table 4. Of those completing the survey, 94% (N=90) were transfer students.

The chi-square value, $\chi^2 (1, N= 96) = 73.50$, $p = .05$, differed significantly from the critical value with one degree of freedom. Therefore, the observed values departed significantly from the expected values assumed by the use of the null hypothesis. The

Table 4

Spring 2003 Undergraduate Hispanic Students' Classification

Student Type	Observed N	Percent	Expected N
Freshman	6	6.0	48.0
Transfer	90	94.0	48.0
Total	96	100.0	96.0

$\chi^2 = 73.50^*$

observations cannot be attributed to chance and the null hypothesis was rejected.

When combining the information on the new undergraduate Hispanic students, a total of 731 students are represented (Table 5). Of that number, 52.1% (N=381) were first-time freshmen; the remaining 47.9% (N=350) were transfers. The difference between the two groups was 31 students.

Table 5

Academic Year 2002-2003 Undergraduate Hispanic Students' Classification

Student Type	Observed N	Percent	Expected N
Freshman	381	52.1	365.5
Transfer	350	47.9	365.5
Total	731	100.0	731.0

$\chi^2 = 1.32; NS$

The calculated chi-square, $\chi^2 (1, N=731) = 1.32, p = .05$, based on the hypothesis of no difference, was not significant; it did not exceed the critical value with one degree of freedom. Therefore, the null hypothesis cannot be rejected and the observed frequency in this case is what one would expect according to chance.

Research Question 3

What is the gender composition of undergraduate Hispanic students at the University of North Texas?

Gender composition data were extracted from the surveys completed by new undergraduate Hispanic students attending spring 2003 orientation (Table 6). Of the 96 respondents answering the question regarding gender, 43% (N=41) were males and 57% (N=55) were females.

Table 6

Gender Composition of Undergraduate Hispanic Students

Gender	Observed N	Percent	Expected N
Male	41	43.0	48.0
Female	55	57.0	48.0
Total	96	100.0	96.0

$\chi^2 = 2.04$; NS

The observed values did not differ significantly from the expected values as specified by the null hypothesis. In accordance with the non-significant chi-square value, $\chi^2 (1, N=96) = 2.04$, $p = .05$, the null hypothesis was retained.

Research Question 4

What is the highest level of education achieved by parents of undergraduate Hispanic students at the University of North Texas?

Information concerning the highest academic level achieved by family members was collected on the new-student survey completed during spring 2003 academic orientations. Two categories, mother and father, were examined (Table 7). Concerning

their mothers' education, 95 students completed the question. Of the 95 students answering, 31.58% (N=30) reported "some college" as the highest level of educational achievement accomplished by their mother. The next highest level was "high school graduate" (N=19, 20%). Only 16.84% (N=16) reported that their mothers had completed Bachelor's degrees or higher.

The calculated chi-square value, $\chi^2(9, N=95) = 84.06$, $p = .05$, concerning mothers' highest level of education was statistically significant. The observed values in Table 7 differed significantly from the expected values for N under the assumption of the null hypothesis of no difference. Therefore, the observed responses cannot be attributed to chance.

Concerning their fathers' level of academic achievement, 91 students provided answers. The highest level of academic achievement reported was "some college" (N=25, 27.47%). The next highest response was "high school graduate" (N=18, 19.78%). A total of 26.37% (N=24) of fathers reported completing a Bachelor's degree or higher.

Under the assumption of no difference, the expected distribution would be 9.1 for each category of fathers' educational level. The observed values were significantly different from those values observed among the survey participants. The overall chi-square exceeds the critical value with nine degrees of freedom. Therefore, the null hypothesis was rejected; the observed values cannot be attributed to chance.

Table 7

Highest Level of Academic Achievement

Academic Level	Mother			Father		
	Observed N	Percent	Expected N	Observed N	Percent	Expected N
Some elementary	13	13.68	9.5	11	12.09	9.1
Elementary graduate	5	5.26	9.5	3	3.30	9.1
Some high school	12	12.63	9.5	10	10.99	9.1
High school graduate	19	20.00	9.5	18	19.78	9.1
Some college	30	31.58	9.5	25	27.47	9.1
Bachelor's Degree	9	9.47	9.5	16	17.58	9.1
Some graduate school	2	2.11	9.5	1	1.10	9.1
Graduate school graduate	4	4.21	9.5	4	4.40	9.1
Some professional school	1	1.05	9.5	1	1.10	9.1
Professional school graduate	—	—	9.5	2	2.20	9.1
Total	95	100.0	95.0	91	100.0	91.0

$\chi^2 = 84.06^*$ $\chi^2 = 69.11^*$

Research Question 5

What majors are most selected by undergraduate Hispanic students at the University of North Texas and what/who influenced that choice of major?

Ninety-four students completed the academic major question on the new-student survey. Each major indicated was recorded and the list of all majors appears in Table 8. The ninety-four students answering the question were bifurcated into forty-two males and fifty-two females. The female participants in the survey selected a total of twenty-eight different majors; the male participants selected twenty-two different majors. The most often cited major for males was radio/television/film (N=5); the most often cited for the females was elementary education (N=8). Of the total individual majors indicated, the highest major selected by both genders combined was elementary education (N=10). The second highest number of total students indicated psychology (N=8) as their major of choice.

The entire list of majors was combined into academic fields to compare the majors selected by new undergraduate Hispanic students at UNT to those in the research literature. The combined list of fields appears in Table 9. When divided into academic fields, the largest single academic field selected by respondents was liberal arts (N=26, 27.7%). There were ten individual majors from the original list (communication studies, Spanish, geography, journalism, philosophy, international studies, psychology, speech-language pathology, speech-language pathology/audiology) combined into the liberal arts category. The second largest category of academic fields selected by respondents education combined only

Table 8

Major Distribution Among New Undergraduate Hispanic Students

Major	Male	Female	Total Observed N
Biochemistry	1 (2.38%)	—	1 (1.06%)
Biology	3 (7.14%)	2 (3.85%)	5 (5.32%)
Chemistry	1 (2.38%)	—	1 (1.06%)
Communication Studies	—	1 (1.92%)	1 (1.06%)
Computer Science	4 (9.52%)	—	4 (4.26%)
Engineering Technology	3 (7.14%)	1 (1.92%)	4 (4.26%)
Spanish	—	2 (3.85%)	2 (2.13%)
Geography	—	1 (1.92%)	1 (1.06%)
Journalism	1 (2.38%)	1 (1.92%)	2 (2.13%)
Philosophy	1 (2.38%)	—	1 (1.06%)
International Studies	2 (4.76%)	—	2 (2.13%)
Psychology	4 (9.52%)	4 (7.69%)	8 (8.51%)
Radio/TV/Film	5 (11.90%)	2 (3.85%)	7 (7.45%)
Speech-Language Pathology	—	1 (1.92%)	1 (1.06%)
Speech-Language Audiology	—	1 (1.92%)	1 (1.06%)
General Business	1 (2.38%)	4 (7.69%)	5 (5.32%)
Accounting	1 (2.38%)	1 (1.92%)	2 (2.13%)
Busi. Computer Info. Systems	3 (7.14%)	1 (1.92%)	4 (4.26%)
Finance	1 (2.38%)	—	1 (1.06%)
Management	—	1 (1.92%)	1 (1.06%)
Marketing	2 (4.76%)	2 (3.85%)	4 (4.26%)
Criminal Justice	1 (2.38%)	—	1 (1.06%)
Emergency Admin. & Planning	1 (2.38%)	—	1 (1.06%)
Development & Family Studies	—	1 (1.92%)	1 (1.06%)

Health Promotion	—	1 (1.92%)	1 (1.06%)
Kinesiology	1 (2.38%)	1 (1.92%)	2 (2.13%)
Elementary Education	2 (4.76%)	8 (15.38%)	10 (10.64%)
Secondary Education	2 (4.76%)	4 (7.69%)	6 (6.38%)
Merchandising	—	1 (1.92%)	1 (1.06%)
Performance	1 (2.38%)	1 (1.92%)	2 (2.13%)
Art	—	1 (1.92%)	1 (1.06%)
Communication Design	1 (2.38%)	2 (3.85%)	3 (3.19%)
Fashion Design	—	4 (7.69%)	4 (4.26%)
Interior Design	—	1 (1.92%)	1 (1.06%)
Photography	—	2 (3.85%)	2 (2.13%)
Total	42	52	94

five fields from the original list of selected majors (development & family studies, health promotion, kinesiology, elementary education, secondary education). The academic field of business combined eight majors (general business, accounting, business computer information systems, finance, management, marketing). When the majors are examined pertaining to selection by gender, the largest single category selected by males was liberal arts (N=13, 32.5%) and for females was education (N=17; 31.5%).

The null hypothesis stated that there would be no difference between majors selected by males and females. By running a cross-tabulation of academic major choice as compared to gender, a resulting $\chi^2(6, N=94) = 22.45, p = .05$, was observed. This chi-square value exceeded the critical value with six degrees of freedom at the .05 alpha level. Therefore, the selections of majors between male and female new undergraduate Hispanic students were significantly different.

Table 9

Academic Fields Selected by Respondents

Academic fields	Male respondents	Percentage	Female respondents	Percentage	Total N	Percentage of total
Sciences	5	12.5	2	3.7	7	7.4
Liberal arts	13	32.5	13	24.1	26	27.7
Engineering	7	17.5	1	1.9	8	8.5
Business	8	20.0	10	18.5	18	19.1
Community service	2	5.0	—	—	2	2.1
Education	3	7.5	17	31.5	20	21.3
Fine arts	2	5.0	11	20.4	13	13.8
Totals	40	100.0	54	100.0	94	100.0

$$\chi^2 = 22.45^*$$

Students were given the opportunity to select who or what caused them to select the major they intended to pursue (Table 10). There were seven answers to choose from plus an “other” category. Students were asked to select all that applied. The most often selected answer, selected by 89.58% of the students, was “self interest” (N=86). The second highest response was “financial stability” (N=39, 40.63%). The lowest selected answer, outside the “other” category (N=8), was “parental influence” (N=9, 9.38%).

Chi square values were calculated for each factor. All factors, “except financially stable” were significant.

Table 10

What/Who were Factors Associated with Choice of Major

Factors	Observed N	Expected N	Percentage	Chi-square
Financial stability	39	48	40.63	3.38 NS
Improve community	26	48	27.08	20.17*
Improve society	31	48	32.29	12.04*
Prestige	17	48	17.71	40.04*
Self interest	86	48	89.58	60.17*
Parental influence	9	48	9.38	63.38*
Friends influence	11	48	11.46	57.04*
Other	8	48	8.33	66.67*

Research Question 6

What percentage of undergraduate Hispanic students plan to use financial aid at the University of North Texas?

Concerning financial aid usage, students were given an opportunity to answer two questions. One asked about the students' plan to use financial aid while in school. The second question asked the students about their ability to stay in school without some type of financial aid.

Table 11

Planned Financial Aid Usage by Undergraduate Hispanic Students

Financial Aid Usage	Observed N	Percent	Expected N
Yes, plan to use	80	84.0	47.5
No, do not plan to use	15	16.0	47.5
Total	95	100.0	95.0

$\chi^2 = 44.42^*$

When asked about their planned usage of financial aid, all but one student (N=95) provided an answer. Those answers appear in Table 11. Of those students responding, 84% (N=80) stated that they plan to use financial aid while in school. Only fifteen students answered that they did not plan to use some sort of financial aid while in school.

The chi-square value, $\chi^2 (1, N=95) = 44.42$, $p = .05$, exceeds the critical value for alpha level .05. The observed frequencies differed significantly from the expected frequencies of the null hypothesis. Therefore, the null hypothesis was rejected. The observed values cannot be attributed to chance.

To investigate the relationship between planned financial aid usage and full/part time attendance, a cross tabulation was run (Table 12). The null hypothesis of no difference between planned usage of financial aid and full-time or part-time attendance was tested.

Only eighty-six students completed the question concerning “semester attendance.” Therefore, the students answering the semester attendance question

(N=86) were compared with the planned financial aid usage question, excluding nine answers from the planned financial aid question. Of the eighty-six answers compared, eighty percent (N=60) of those planning to use financial aid were planning to

Table 12

Planned Financial Aid Usage by Full-time/Part-time Attendance

Financial Aid Usage	Full-time Attendance	Part-time Attendance	Total
Yes, plan to use	60 (80%)	15 (20%)	75
No, do not plan to use	6 (54.55%)	5 (45.45%)	11
Total	66	20	86

$\chi^2 = 3.843^*$

attend full-time. Of those not planning to use financial aid, the bifurcation between full-time and part-time was almost even: 54.55% (N=6) full-time, 45.45% (N=5) part-time. But, the total number of students planning not to use financial aid was much smaller overall (N=11). The cross tabulation was significant, $\chi^2 (1, N=86) = 3.843$; $p = .05$. Thus, the null hypothesis that there would be no difference for planned financial aid usage between full-time and part-time students was rejected.

Only three students declined to provide an answer to the question concerning their ability to attend UNT without financial aid. Of the ninety-three providing answers, the majority (N=64, 69%) answered that they would not be able to attend UNT without some sort of aid. The remaining students (N=29, 31%) responded that they could attend UNT without financial aid assistance. Only fifteen students responded that they did not

plan to use financial aid (Table 11); twenty-nine students responded that they could attend school without financial aid (Table 13), it appears that not all student

Table 13

Ability to attend UNT without Financial Aid

Able to attend UNT without financial aid?	Observed N	Percent	Expected N
Yes	29	31.0	46.5
No	64	69.0	46.5
Total	93	100.0	93.0

$\chi^2 = 13.18^*$

planning to use financial aid absolutely needed financial aid to attend college.

The observed values differed significantly from the expected values for this question, $\chi^2 (1, N=93) = 13.18, p = .05$. The observed values, therefore, cannot be due to sampling error and the null hypothesis was rejected.

A cross tabulation was run to compare the ability to attend UNT without financial aid by full-time and part-time students (Table 14). Only 86 of the ninety-three students answering the financial aid question responded to the semester hour attendance question. Therefore, seven student answers were excluded from the cross tabulation.

Of the twenty-six students answering that they would be able to attend UNT without financial aid, 61.54% (N=16) were full-time students; 38.46% (N=10) were part-time students. Of the sixty students answering “no,” they would not be able to attend without financial aid, 83.33% (N=50) were full-time students; the remaining 16.67% (N=10) were part-time students. When figuring the percentages of the columns, 74.63%

Table 14

Ability to attend UNT without Financial Aid by Semester Hour Attendance

Able to attend UNT without financial aid?	Full-time Attendance	Part-time Attendance	Total
Yes	16 (61.54%)	10 (38.46%)	26
No	50 (83.33%)	10 (16.67%)	60
Total	66	20	86

$\chi^2 = 4.828^*$

of full time students (N=50) reported that they would not be able to attend school without the help of financial aid; leaving only 23.88% (N=16) of full-time attendees reporting they could attend UNT without financial aid. The part-time attendees were bifurcated exactly in half between those that reported “yes” (N=10) they could attend UNT without financial aid and “no” (N=10) they could not attend UNT without financial aid.

The chi-square of the cross tabulation, $\chi^2 (1, N=86) = 4.828$; $p = .05$, was significant. Therefore, the null hypothesis was rejected. The findings of the cross tabulation of ability to attend school without financial aid versus full-time or part-time attendance resulted in true variations of answers from the students surveyed and were not due to chance.

Research Question 7

What is the six-year graduation rate of Texas undergraduate Hispanic students at the University of North Texas?

Information concerning six-year graduation rates were collected by the UNT Institutional Research Office and shared with the researcher for this study. Figures concerning first-time, full-time degree seeking freshmen students' continuation from year to year and four-year, five-year and six-year graduation rates were shared in terms of percentages. Those cohorts who have had time to reach a six-year graduation goal are shown in Table 15.

Table 15

Hispanic Freshmen Continuation and Graduation Rates

Cohort Year	Cohort numbers	Continued to 2 nd year	Continued to 3 rd year	Graduated in 4 years	Continued to 5 th year	Graduated in 5 years	Continued to 6 th year	Graduated in 6 years
1995	157	79.0%	58.6%	4.5%	45.9%	25.5%	20.4%	33.8%
1996	175	80.0%	54.3%	9.7%	37.1%	25.7%	18.9%	33.7%

The continuation rate to second year between the two cohorts is similar: 79% and 80%, respectively. However, double the percentage graduated in four years in the 1996 cohort (9.7%) compared to the 1995 cohort (4.5%). Meanwhile, the five-year graduation rates and the six-year rates were very similar between the two cohorts, but at the end of six years, only a little over one-third of the Hispanic students from the 1995 and 1996 cohort had graduated from UNT.

Research Question 8

Who was most influential in the academic decisions made by undergraduate Hispanic students at the University of North Texas?

Students were asked to rate several categories of people on the type of influence they had on the academic decisions made by the students themselves. Students rated

these people based on whether they provided a “significant influence”, “some influence” or “no influence” (Table 16). The number of students responding to each section differed.

Only two people were rated by the students as providing “significant influence.” A total of ninety-four students provided answers for the “mother” category. “Mother” was rated as providing “significant influence” by 60.64% (N=57) of the total students responding concerning their mother’s influence. Eighty-nine students responded to the category for “father.” A total of 55.06% (N=49) of those eighty-nine rated “father” as providing a “significant influence.”

Two categories were rated by students as providing “some influence.” The faculty and teacher category was designated by 42.05% (N=37), of the eighty-eight answering, as providing some influence. Siblings were rated by 42.86% (N=36) of the eighty-four students responding to have “some influence” on their decisions.

The last category of significance included those people who provided “no influence.” Of the seventy-nine responding, 60.76% (N=48) rated high school friends in this category. Similarly, out of eighty students, 47.5% (N=38) responded that boy/girl friends had no influence. Only sixty-one students responded to the category of “spouse/significant other” with 55.74% (N=34) claiming this group provided “no influence” on decisions. With seventy-two students responding, college friends had 44.44% (N=32) of the students declaring that they provided “no influence” in their decisions. Interestingly, thirty-one students rated college students as providing “some influence”; only one person lower than those that placed them in the “no influence”

Table 16

Persons Influential on Academic Decisions of Undergraduate Hispanic Students

Category	N	Significant Influence	Some Influence	No Influence
Mother	94	57 (60.64%)	30 (31.91%)	7 (7.45%)
Father	89	49 (55.06%)	30 (33.71%)	10 (11.24%)
High school friends	79	8 (10.13%)	23 (29.11%)	48 (60.76%)
Boy/girlfriend	80	25 (31.25%)	20 (25.00%)	38 (47.50%)
Spouse/significant other	61	18 (29.51%)	9 (14.75%)	34 (55.74%)
College friends	72	9 (12.50%)	31 (43.06%)	32 (44.44%)
Faculty/teachers	88	29 (32.95%)	37 (42.05%)	18 (20.45%)
Siblings	84	26 (30.95%)	36 (42.86%)	22 (26.19%)
Other	36	12 (33.33%)	3 (8.33%)	21 (58.33%)

category. Finally, out of the thirty-six responding, 58.33% (N=21) responded that someone other than those listed as possible answers in the question warranted mentioning but had “no influence” on their decisions.

A second question examined whom the students considered to be most influential in their decision to attend UNT. The students were given a list of people to

choose from and were asked to select the one person who most influenced them in their decision to enroll at UNT. Eighty-five students provided answers (Table 17). The

Table 17

Person Most Influential on Students' Choice to Attend UNT

Person	Observed N	Percent	Expected N
Mother	10	11.76	7.73
Father	7	8.24	7.73
High school friends	4	4.71	7.73
Boy/girlfriend	5	5.88	7.73
Spouse/significant other	4	4.71	7.73
College friends	6	7.06	7.73
Faculty/teachers	7	8.24	7.73
Siblings	5	5.88	7.73
Others	14	16.47	7.73
Family	3	3.53	7.73
Me	20	23.53	7.73
Total	85	100.0	85

$\chi^2 = 34.18^*$

answer receiving the most responses was actually a write-in response and was not provided as one of the given answers from which to choose. Of the eighty-five students answering, 23.53% (N=20) wrote in the response, “me,” in the “other” category. The next highest response was given in the category of “other” (N=14). The third highest

response was “mother,” 11.76% (N=10). When considering parents together, mother and father, 20% (N=17) of students indicated mother and father combined would be the most influential in their decision to attend UNT. When combined, mother and father would be the second highest category selected right behind the write-in response of “me.”

Research Question 9

What types of emotional support are given by family members of undergraduate Hispanic students concerning their plans to attend and succeed in college?

Two questions were asked in the new-student survey to measure the types of emotional support provided to students concerning their plans to attend college. The first question addressed how the students’ families viewed the students’ plans to attend college. Answers included “naturally assumed,” “encouraged but not assumed,” “neither encouraged nor discouraged,” and “discouraged” (Table 18). The second question asked about the students’ families’ interest in their grades while in college. Answers to this question were selected from “very interested,” “somewhat interested,” and “not interested” (Table 20). These questions were included to determine how supportive the students’ families were in their aspirations to attend school and succeed.

Ninety-six students answered the question concerning support given to plans to attend college. Of those answering, the majority (N=58, 61.05%) answered that it was “naturally assumed” they would go to college. The second highest response was for “encouraged but not assumed” (N=24, 25.26%). A grand total, then, of 86.32% (N=82) felt they were at least encouraged to attend school. Only one student responded

Table 18

Emotional Support Given for College Attendance

College Attendance	Observed N	Percent	Expected N
Naturally assumed	58	61.04	19.2
Encouraged but not assumed	24	25.00	19.2
Neither encouraged or discouraged	12	12.50	19.2
Discouraged	1	1.04	19.2
Other	1	1.04	19.2
Total	96	100.0	96.0

$\chi^2 = 116.81^*$

that they were discouraged from attending school (1.05%) and the remaining (N=12, 12.63%) answered they were neither encouraged nor discouraged from attending school.

The observed responses differed significantly from the expected responses. The chi-square value, $\chi^2 (4, N=96) = 116.81, p = .05$, was significant. The observed responses cannot be due to sampling error and the null hypothesis was rejected.

A cross tabulation was run between emotional support toward school attendance and gender. All ninety-six students participating in the survey responded. The bifurcation between males and females feeling it was naturally assumed they would go to school was almost even; 56.9% (N=33) females and 43.1% (N=25) males. Of those responding they felt encouraged but it was not assumed they would attend school,

Table 19

Emotional Support Given for College Attendance Compared by Gender

School Attendance	Female	Male	Total
Naturally assumed	33 (56.9%)	25 (43.1%)	58 (100.00%)
Encouraged but not assumed	16 (66.7%)	8 (33.3%)	24 (100.00%)
Neither encouraged or discouraged	4 (33.3%)	8 (66.7%)	12 (100.00%)
Discouraged	1 (100%)	—	1 (100.00%)
Other	1 (100%)	—	1 (100.00%)
Total	55	41	96

$\chi^2 = 5.17$; NS

66.7% (N=16) were females and 33.3% (N=8) were males. Combining the two categories into an “encouraged” group provides a reference for the total number of students who felt encouragement to attend school: 89.09% (N=49) of females and 80.49% (N=33) of males felt encouragement.

The null hypothesis stated that there would be no difference for the support given based on gender. The chi-square for this cross tabulation, $\chi^2 (4, N=96) = 5.17$, $p = .05$, was not significant. Therefore, the null hypothesis was retained. For a 2x2 contingency table with less than 5 in any single category, a Fisher’s exact test is recommended to obtain a more valid result (Huck, 2000; McMillan, 2000). However, even with the cells

combined to fit a 2x2 contingency table, measuring encouraged versus not encouraged, and having run a Fisher's exact test, the results were still non-significant at $p=.05$.

Research Question 10

Why did enrolled undergraduate Hispanic students choose to attend the University of North Texas?

Table 20

Family Interest in School Success

Interest Level	Observed N	Percent	Expected N
Very interested	68	70.83	32
Somewhat interested	24	25.00	32
Not interested	4	4.17	32
Total	96	100.0	96

$$\chi^2 = 67.0^*$$

Regarding family interest in their school success, all ninety-six students provided answers. The majority of students (N=68, 70.83%) answered that they believed their families were very interested in their grades.

Under the assumption of the null hypothesis, the expected values for each category would be 32. The observed distribution of responses differed from the expected responses significantly, $\chi^2 (2, N=96) = 67.0, p = .05$. The observed distribution cannot, therefore, be attributed to sampling error.

Family interest in school success compared by gender was examined to look for possible significant results (Table 21). The cross tabulation examining family interest in

school as compared by gender did not result in a significant chi-square, $\chi^2 (2, N=96) = 1.93, p = .05$. The null hypothesis of no difference in family interest in school success between the two genders was retained.

Table 21

Family Interest in School Success Compared by Gender

Interest Level	Female	Male	Total
Very interested	42 (61.76%)	26 (38.24%)	68 (100.00%)
Somewhat interested	11 (45.83%)	13 (54.17%)	24 (100.00%)
Not interested	2 (50.00%)	2 (50.00%)	4 (100.00%)
Total	55	41	96

$\chi^2 = 1.93; NS$

Students were asked to indicate the reasons why they chose to attend UNT. Students were given a list of choices (Table 22) and asked to indicate all that applied. Out of a possible ninety-six responses to each indicator, students either selected the indicator as a reason why they chose to attend UNT or not did not select the indicator, thus bifurcating the expected frequency into two possible answers. “Academic major” was selected by 61 of the respondents followed by “proximity to home” (N=54) as the second most selected response. The third most selected factor was “academic reputation of college” (N=49) and “cost” received the fourth highest number of responses (N=42). Of all the responses given, the lowest numbers of responses were given to “parents wanted you to” (N=3) and “extra-curricular activities” (N=3).

Table 22

Reasons Students Chose to Attend UNT

Reason	Observed Frequency	Expected Frequency	Chi-Square Values
Social life	21	47.5	29.57*
Cost	42	48	1.50 NS
Size of college	28	48	16.67*
Relative enrolled	5	48	77.04*
Parents wanted you to	3	48	84.38*
Financial aid/scholarship	15	48	45.38*
Academic majors	61	48	7.04*
Academic reputation	49	48	.04 NS
Extra-curricular activities	3	48	84.38*
Diversity of campus	24	48	24.0*
Proximity to home	54	48	1.50 NS
Friends enrolled here	23	48	26.04*
Desire to live away from home	23	48	26.04*
Campus facilities/landscape	4	48	80.67*
Recommended by HS counselor/college advisor	5	48	77.04*
Other	5	48	77.04*

Calculating a chi-square on each individual indicator provided reason for accepting the null hypothesis. The critical value of chi-square for one degree of freedom is 3.84. Of all the indicators given as possible answers, each produced significant chi-squares except “cost” [$\chi^2 (1, N=96) = 1.50, p = .05$], “proximity to home” [$\chi^2 (1, N=96) = 1.50, p = .05$] and “academic reputation” [$\chi^2 (1, N=96) = .04, p = .05$]. Therefore, the results of the indicators of cost, proximity to home and academic reputation could be attributed to chance. The results from the other indicators could not be attributable to chance.

In a follow up question on the new-student survey, students were asked to rate the reasons they chose UNT as their first, second and third most important reason. Those results are shown in Table 23.

Ninety-three students weighed in on their most important reason for selecting to attend UNT. Of all the factors listed as “most important” in the students’ selection of UNT, respondents selected academic majors (N=43) most often. The second highest answer in the “most important” category was academic reputation (N=15).

Eighty-seven students responded to the question asking them to cite the “second most important” reason for choosing UNT. The most often cited factor in the “second most important” category was “cost” (N=17). Following “cost” as “second most important” was “proximity to home” (N=14).

Seventy-six students answered the question concerning the “third most important” reason they selected UNT. The answer receiving the highest number of responses was “proximity to home” (N=13). “Academic reputation” received the second highest number of responses (N=11) in this category.

Table 23

Most Important Reasons Students Chose to Attend UNT

Reason	Most Important	Second Most Important	Third Most Important	Total N
Social life	—	1	7	8
Cost	8	17	8	33
Size of college	3	8	5	16
Relative enrolled	1	—	2	3
Parents wanted you to	1	—	2	3
Financial aid/scholarship	2	7	3	12
Academic majors	43	12	6	61
Academic reputation	15	13	11	39
Extra-curricular activities	—	1	1	3
Diversity of campus	1	6	7	14
Proximity to home	12	14	13	39
Friends enrolled here	2	4	3	9
Desire to live away from home	3	4	6	13
Campus facilities/landscape	—	—	1	1
Recommended by HS counselor/college advisor	—	—	1	1
Other	2	—	—	2
Total	93	87	76	

When looking at the indicators individually, “academic major” (N=43) and “academic reputation” (N=15) received the most responses under “most important reason.” “Cost” (N=17), “size of college” (N=8), “financial aid/scholarship” (N=7), “proximity to home” (N=14) and “friends enrolled here” (N=4) received the highest number of responses in the “second most important” category. Finally, the indicators receiving the most responses under the “third most important” category were “social life” (N=7), “relative enrolled” (N=2), “parents wanted you to” (N=2), “diversity of campus” (N=7), and “desire to live away from home” (N=6). “Extra-curricular activities” had the same number of responses in each the second and third most important categories (N=1; N=1). “Campus facilities” and “recommended by high school counselor/college advisor” each received one response total and that response was in the “third most important” category.

Research Question 11

What factors do new undergraduate Hispanic students think will keep them from graduating from the University of North Texas?

Students were asked to respond to a question concerning their intent to graduate from UNT and what factors could hinder their graduation. Six different factors were given plus an “other” category. Students were given the opportunity to select all answers which applied to them; therefore, each factor had a possible maximum response of ninety-six. Students would either select the response, if it pertained to what could hinder their graduation, or left the factor blank if it was not a factor (Table 24) that hindered their possibility of graduating. Assuming the null hypothesis, the expected

frequency for each factor would be half of the total responses for that factor. Results are listed in Table 24.

Table 24

Factors that could Hinder Graduation

Factor	Observed Frequency	Expected Frequency	Percent	Chi-square Value
Finances	71	48	73.96	22.04*
Family responsibilities	21	48	21.88	30.38*
Won't fit in/belong	1	48	1.04	92.04*
Lack of students "like" you	—	n/a	—	—
Campus climate/discrimination	4	48	4.17	80.67*
Not prepared for university level work/poor grades	4	48	4.17	80.67*
Other	9	47.5	9.38	62.41*

Of students completing the survey, 96.81% (N=91) intended to graduate from UNT. From the list of all the factors, 73.96% (N=71) of respondents answered that finances would be the factor that could keep them from graduating. The second highest factor designated was "family responsibilities" (N=21, 22.88%). The remaining named factors received less than five responses each: "won't fit in or belong" (N=1), "campus climate/discrimination" (N=4), and "not prepared for university level work/poor grades"

(N=4). A “lack of students ‘like’ you” received no responses (N=0). The final category, “other,” received nine responses (N=9).

The chi-square values for each factor were run separately. The expected frequency was determined, in conjunction with the null hypothesis, to be half of the total responses for each factor. Each chi-square was significant at the .05 alpha level. No chi-square was performed on the factor “lack of students like you” since it was not selected by any participants as a factor that might hinder graduation.

CHAPTER 5
SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND
RECOMMENDATIONS

Introduction

This study sought to examine and identify pre- and post-matriculation academic characteristics of Hispanic undergraduate students at the University of North Texas. The study also identified demographic trends among undergraduate Hispanic students at UNT. The study consisted of 11 purposes: 1) to determine geographic origins of the undergraduate Hispanic students at UNT in terms of location of educational institution attended prior to matriculation; 2) to establish whether students entered UNT as true freshmen or transfer students; 3) to ascertain the gender composition of undergraduate Hispanic students at UNT; 4) to report the highest level of education achieved by parents of undergraduate Hispanic students at UNT; 5) to explore patterns in major selection of undergraduate Hispanic students at UNT and who or what influenced that choice of major; 6) to ascertain the percentage of undergraduate Hispanic students at UNT who plan to use financial aid during their enrollment; 7) to examine the graduation rates among undergraduate Hispanic students at UNT; 8) to determine who is most influential in the academic decisions made by Hispanic undergraduate students at UNT; 9) to discover what type of emotional support is given to Hispanic students pertaining to their college enrollment and success; 10) to establish why Hispanic undergraduate students elect to attend UNT; and 11) to discover what factors prohibit new

undergraduate Hispanic students at UNT from graduating. Finally, the study sought to answer or address the research questions presented for study.

Summary of the Findings

The summary of the findings is presented in this section. Each research question is examined separately.

Research Question 1

Of the geographic regions which produced students matriculating to UNT, the majority of students were from the state of Texas. Furthermore, the majority of students matriculated from the Dallas and Fort Worth/Arlington metropolitan statistical areas. Just over one-third of the students matriculated from outside the Dallas/Fort Worth area.

Research Question 2

Concerning the classification of new undergraduate Hispanic students, fall 2002 data showed a majority were classified as new freshmen at the time of matriculation. The majority of new undergraduate Hispanic students who entered UNT in the spring 2003 semester were transfer students. When the data were compared for the academic year, the total enrollment of new undergraduate Hispanic freshmen and new undergraduate Hispanic transfer students was approximately even.

Research Question 3

Question three explored the gender composition of new undergraduate Hispanic students at the University of North Texas. The percentages of new undergraduate Hispanic males to new undergraduate Hispanic females were approximately even.

Research Question 4

The highest level of education achieved by parents of the majority of undergraduate Hispanic students at UNT was “some college.” Approximately one half of mothers and one half of fathers had attended college. Just under a quarter of mothers and just over a quarter of fathers had earned a Bachelor’s degree or higher.

Research Question 5

The major most frequently selected by undergraduate Hispanic males at the University of North Texas was radio, television, and film. The major most frequently selected by females was elementary education. The male students completing the new-student survey for this study most frequently selected a major from the field of liberal arts. The female students most frequently selected a major within the field of education.

Concerning who or what influenced the students in selecting their major, the answer that received the highest number of responses was “self interest.” The second most frequently selected response was “financial stability.” The least selected answer was “parental influence.”

Research Question 6

Of the students who answered the question concerning planned financial aid usage, the majority indicated they planned to use financial aid. Of those who planned to use financial aid, the majority planned to attend full-time.

The majority of students indicated that they would not be able to attend UNT without financial aid and furthermore stated they would not be able to attend UNT without financial aid assistance.

Research Question 7

The seventh research question addressed the six-year graduation rate of undergraduate Hispanic students at the University of North Texas. When compared to the total UNT population in the 1995 and 1996 cohorts, the 1995 and 1996 Hispanic student cohorts were similar in retention and graduation rates.

Research Question 8

Students rated only two people as providing a “significant influence” on their decision-making: mother and father. Students rated two categories of people as asserting “some influence:” faculty/teachers and siblings. Students ranked “high school friends,” “boy/girlfriend,” “spouse/significant other,” and “other” as those people who exerted “no influence” on their decisions.

Of the answers selected concerning who was most influential on the students’ decision to attend UNT, the highest selected category was a write-in response of “me.” The combination of “parents” was the second most selected category.

Research Question 9

Of those who answered the question examining the emotional support provided to undergraduate Hispanic students concerning their plans to attend college, the majority indicated it was “naturally assumed” by their parents that they would attend college after high school. The second highest response was “encouraged but not assumed.” When compared by gender, both the majority of Hispanic females and males felt it was “naturally assumed” they would attend college.

The second question on the new-student survey asked the students about their families' interest in the student's grades. The majority indicated that their parents were "very interested" in their grades.

Research Question 10

Of the indicators listed, "academic majors" was the most frequently selected answer concerning why the students chose to attend UNT. The second most frequently selected response was "proximity to home." "Academic reputation" had the third highest number of responses; followed by "cost." The least frequently selected responses were "parents wanted you to" and "extracurricular activities."

When looking at each indicator, "academic major" and "academic reputation" received the most responses under "most important reason" why students chose to attend UNT. "Cost," "size of college," "financial aid/scholarship," "proximity to home," and "friends enrolled here" received the highest number of responses in the "second most important" category. Finally, "social life," "relative enrolled," "parents wanted you to," "diversity of campus," "campus facilities," "recommended by high school counselor/college advisor," and "desire to live away from home" received the highest number of responses in the "third most important category." "Extracurricular activities" had the same number of responses in each the second and third most important categories.

Research Question 11

The final research question explored the factors undergraduate Hispanic students thought would hinder their graduation from UNT. "Finances" received the

highest number of responses. The second highest number of responses was given to “family responsibilities.”

Discussion of the Findings

The eleven research questions explored characteristics of undergraduate Hispanic students at the University of North Texas. When compared to the characteristics of Hispanic students in the literature, a major finding of this study is that undergraduate Hispanic students attending the University of North Texas exhibit both characteristics similar to those in previous research as well as characteristics that depart from what may be considered the “norm” for this population. The results found in the current study indicate changes occurring which could affect what is considered characteristic of the undergraduate Hispanic student population in past research and bring forth a new set of characteristics for the undergraduate Hispanic student population enrolling in higher education today. The following section discusses the findings of this study.

Research Question 1

Geographic Regions Producing Undergraduate Hispanic Students

Undergraduate Hispanic students enrolled at UNT matriculated from within Texas and primarily from the local Dallas/Fort Worth area. While other states within the United States report high numbers of Hispanic people (Rendon et al., 1996), those particular college age students are not the population enrolling at UNT. Being a regional, state university, the institution is designed to serve the students of the state of Texas. According to this premise, very few recruitment activities, including recruitment visits or informational mailings, are conducted outside the state. Because the recruitment

activities and purpose of the institution is to educate Texas residents, one could assume that the majority of UNT students would and do matriculate from within Texas. UNT is located amongst the fastest growing counties in the nation and among counties experiencing the largest growth in the Hispanic population (US Census, 2000). This places the institution within close proximity to a large Hispanic population, which assists in drawing a larger number of Hispanic students to the campus.

Despite statewide recruitment efforts to attract undergraduate Hispanic students from across the entire state, almost two-thirds of the students enrolled from within UNT's the metropolitan area located near the campus. The influx of undergraduate Hispanic students from the local area to UNT may be attributable to the convenient location of the campus. Since UNT is located near their families' homes, the Hispanic students may feel that attending UNT will allow them to stay involved with, and meet their responsibilities to, their families. The location of UNT also allows students to commute to school from their homes rather than live on campus, if they desire. Conversely, students who would like to live on campus may elect to do so and still be within driving distance of home allowing them access to their family at any time. Additionally, students may also continue to be employed while attending school. Finances and financial stability are important to Hispanic students. Attending school nearby their current employment will allow for opportunities to financially support themselves and their family. Finally, since a majority of Hispanic students elect to first attend a community college (Wilds, 2000), the transfer students from the local community colleges would also find UNT conveniently located so that they may

continue their education without relocating again, providing for opportunities to remain near their families and their employment.

Research Question 2

Freshmen versus Transfer Classification

Hispanic transfer students matriculating at UNT are joined in their enrollment by Hispanic freshmen electing to make UNT their higher education home. When examining the classification of new undergraduate Hispanic students a disparity was found between the fall and the spring semesters. This disparity also exists among the entire UNT population. Fall semester enrollment consists of a majority of freshmen who elect to enroll in the fall semester immediately following their high school graduation. Most students who had enrolled in the spring had previously attended another institution, making them transfer students. The classifications of undergraduate Hispanic students are similar to the classification characteristics seen in other student populations enrolled at UNT. However, when the academic year is examined the split between Hispanic freshmen and Hispanic transfer students is almost even.

The Wilds (2000) study found that the majority of Hispanic students attending college would initially elect to attend community colleges, however this inquiry reported contrary findings. The majority of undergraduate Hispanic students attending UNT within an academic year were freshmen. As mentioned previously, the proximity of UNT to the students' home appears to be a contributing factor in the increased enrollment of freshmen over transfer students. Community colleges often market their convenient location as an advantage for their institution. If convenient location is one of the determining factors for the Hispanic students' enrollment at community colleges, then

UNT's convenient location would provide the same opportunities for the local undergraduate Hispanic students thereby eliminating the necessity to attend community college to ensure close proximity to family and work.

Research Question 3

Gender Make-up of Undergraduate Hispanic Students

Just as the distribution of Hispanic freshmen and Hispanic transfer students mimics the distribution of the freshmen and transfer students within the population at-large, so too does the gender distribution of the Hispanic students. The gender distribution of undergraduate Hispanic males and undergraduate Hispanic females is comparable to the gender distribution within the entire undergraduate student population at UNT. From previous research, it would have been thought that more males than females would be matriculating at UNT. This is not the case found by the current study. The literature also suggested that the selection of majors by Hispanic students differs by gender (McJamerson, 1992). Perhaps this explains the difference in the gender composition at UNT. Hispanic males often select majors that are technical or vocational in nature, such as engineering (McJamerson, 1992). UNT does not offer technical or vocational bachelor degree programs and does not have a full engineering major. This could deter Hispanic males from seeking educational opportunities at UNT. However, Hispanic females often select majors within the field of education (McJamerson, 1992), and UNT has a large education program. The education degrees available at UNT, coupled with the lack of a true engineering program, could account for the difference in the gender distributions found in this study. The finding that more females than males attended UNT is not consistent with the literature, which states

Hispanic males receive more encouragement to take advantage higher education opportunities (Rendon & Valadez, 1993).

Research Question 4

Family Educational Level

The decreasing ratio of male to female students could also be contributed to the ever increasing numbers of Hispanic parents taking advantage of higher education opportunities, thus encouraging their children to follow suit. Approximately half of the population surveyed has parents with no prior college experience, thus making the student the first in their family to attend college. This first-generation characteristic of Hispanic students is supported by the research of Weissman et al. (1998) who found that students are often the first in their family to attend college and that their desire to succeed is driven by a desire to be an example to others. The finding that half of the population in this study has parents with prior college experience was somewhat higher than would have been predicted based on past research (Mendez-Caitlin, 1995; Weissman et al., 1998). Perhaps this result is due to the fact that opportunities for higher education exist not only for Hispanic children, but also for their parents. The urban locale of many of the Hispanic families places them in the position to have higher education facilities within close proximity. As increased numbers of Hispanic parents take advantage of higher education, the hindrance of being a “first generation college student” will decrease. The shift in this “first-generation” characteristic will serve to ultimately benefit Hispanic students. Past research has shown that Hispanic parents’ lack of knowledge concerning higher education procedures and attributes is detrimental to the academic success of their children in the higher education system (Padilla, 1991).

When these parents have taken the opportunity to enroll in school, and even graduate, they will obtain increased heuristic knowledge about higher education. Heuristic knowledge has been shown to increase the opportunities for success of those enrolling in higher education institutions. Parents' knowledge of the higher education system will allow the students to better understand procedures such as admission, financial aid, and registration, which are occasionally confusing and unfamiliar to the students. Furthermore, as parents take advantage of higher education and/or become more aware of the advantages of higher education, they will be more supportive of their children seeking the opportunity of higher education themselves. This support is vital to the persistence and academic success of Hispanic students (Weissman et al., 1998). Additionally, the desire to maintain the "American dream" could be encouraging Hispanic parents to further their status through education. Higher education is promoted as a way to increase the opportunities for a successful life. Hispanic parents, living more within the urbanized areas, have become acclimated to this belief and may also begin to seek the pathway to a successful lifestyle through higher education.

Still, approximately half of the parents of Hispanic students have not attended an institution of higher education, yet their children are knowledgeable of higher education and capable of entering higher education themselves. Information concerning college attendance and navigation of the procedures is filtering from someone or somewhere other than parents. With a majority of the Hispanic student population matriculating from urban areas, one provider of such information could be the secondary schools. These schools offer programs concerning pre-college planning activities such as course selection, testing, and completion of appropriate forms. Additionally, teachers within

these schools who take an interest in Hispanic students provide a plethora of assistance and mentoring. The teachers who take the time and energy to assist these students are respected by the students themselves and are thus looked to as role models. One teacher showing a little interest can influence a student and shape their future. Other information could be filtering from the different media sources available to Hispanic students. Students in general are more computer literate and capable than ever before. The schools, especially within urban areas, provide opportunities, training and availability of computers for all students. Hispanic students, like other ethnic student groups, are much more skilled concerning computer usage than their parents. With the increased activity and marketing on the Internet, students have information at their fingertips. Institutions of higher education utilize this medium as a means to provide information to their potential students, and the students are very likely to be receiving their information about the institutions from this source. Students are also very oriented to “pop-culture.” They look to entertainers and athletes as role models; they tune to radio and television for current information and entertainment. Higher education, realizing this trend, has increased marketing by way of commercials on radio and television stations. Public service announcements cover educational topics such as financial aid, application forms, and staying in school. This form of marketing is especially targeted to reach students. It is possible, then, that Hispanic students receive a portion of their educational information by way of the television and radio advertisements.

Finally, acculturation could explain the shift in the belief system and educational emphasis of the Hispanic population. The process of acculturation allows Hispanic

people to adapt to and adopt portions of the culture existing around them while maintaining their own specific ethnic culture as well. Hispanic families raising their children within the urban areas are involving those children from an early age in a system of beliefs and exercises unlike those previously known within the Hispanic population. The different cultural environment and beliefs are encouraging changes in the Hispanic culture. Although the Hispanic people still maintain the core of their own cultural beliefs, they are also adapting to fit this newer belief system into their way of life. Due to the acculturation process, Hispanic parents are becoming savvier to the opportunities and advantages available to them and to their children. Higher education is promoted within the urban culture, and Hispanic families have become initiated to the beliefs surrounding the value of education and expect this opportunity for their families as well. The opportunities of higher education provide Hispanic students with avenues to future employment and the prospect of studying academic fields of interest to them.

Research Question 5

Academic Majors

As a whole Hispanic students most often concentrate within the fields of liberal arts and engineering (McJamerson, 1992). The finding of this study indicates that the largest one academic field selected by undergraduate Hispanic students is indeed liberal arts. Engineering, however, was only selected by 7.5% of the respondents. UNT does not have a full engineering program, so it stands to reason that very few, if any, engineering majors would be found. On the other hand, the finding that liberal arts is the most selected major could be skewed because of the number of individual majors assigned to this field by the researcher. When the individual majors were combined into

fields, ten of the individual majors were placed in the liberal arts category. Only two individual majors were combined to make up the engineering field of study.

However, when examined by gender, differences were found to exist concerning choice of majors both in the literature and in this study. The male Hispanic students most frequently selected liberal arts majors, which is not consistent with the McJamerson (1992) study and may be due to the fact that UNT does not have an engineering program. The male students' selection of Radio/Television/Film (RTVF) as the most frequently selected major of choice was not consistent with past research because students selected majors that were more financially secure and prone to immediate work possibilities. Interest in this particular major may be attributable to pop-culture and the "dream" of fame. Students see their pop idols as successful and performing for the public. A factor cited as influencing choice of major was to "improve society." Perhaps this factor is the reason behind the choice of RTVF as a major for Hispanic males. By majoring in RTVF and seeking work in that field, students not only pursue their interests, but they provide themselves opportunities for potential wealth and opportunities to give back to society. Another possible explanation could be the male Hispanic students' interest in technical fields of study. The technical nature of RTVF could be the reason behind the students' interest in this particular field. Because UNT does not have a plethora of technical programs from which to choose, the males may have chosen a major that represents the field most similar to a technical program while also offering opportunities for financial wealth.

Female Hispanic students, however, are not interested in the more technical fields of study. Consistent with the literature (McJamerson, 1992), female Hispanic

students most frequently selected education majors. Perhaps female Hispanic students select education due to the emphasis of the Hispanic culture on family and children. Females, in wanting to help support the family, select a major in which they can provide a stable financial future as well as be with the children both at work and during holiday breaks. Few other fields allow someone to spend as much time with their children as the field of education. In addition, UNT has a large College of Education and multiple education programs providing increased opportunities for the enrollment of Hispanic females.

Who/What Influenced Choice of Major

Although the academic majors selected by Hispanic students somewhat met that cited in the literature, who or what influenced the students' choice of major did not. The result of this study concerning who or what influenced the students' choice of major was not consistent with the Rendon and Valadez (1993) study, as they found "parental influence" is particularly important in selecting a major. Undergraduate Hispanic students most frequently selected "self interest" as what/who influences their choice of major; "parental influence" exerted the least influence. Therefore, it appears that the students at UNT select their major due specifically to their interest in that particular field. Perhaps this finding is due to the number of transfer students participating in the study. Transfer students have higher education experience and, through the transfer process, have become more independent (Christie & Dinham, 1992). They have forged bonds with the higher education environment and thus have lessened their dependence on family. A by-product of this independence is indicated through their own influence in choice of major. Urban surroundings could also produce a more independent student

who, seeing the vast employment opportunities within the city, decide they can select their own major according to their personal interests. Although parents are not cited as influencing choice of major, parents have instilled values within their children. These values are likely to provide influence on the decisions and choices made by the students even if the students do not recognize that fact.

The second most frequently selected factor, “financial stability,” is consistent with the research cited in the literature (Rendon & Valadez, 1993). Financial concerns are an integral part of the Hispanic culture. Students in this study supplied answers that corroborate that finances are a concern. Parents want to provide for their families and children often work in order to assist with the family financial situation. Since finances are a stressor and hold such importance to this population, one may presuppose that financial stability would be a desire influential to those selecting majors.

Research Question 6

Financial Aid Usage

Financial stability is not only a consideration when Hispanic students consider selecting a major, but is also a consideration in many of the decisions they make. When electing to enroll at school, Hispanic students realize that finances can be a barrier to their success and search for possible ways to meet their financial needs. A majority of undergraduate Hispanic students plan to use financial aid and indicate they cannot attend UNT without it. These findings are consistent with the literature, which reported that finances are a stressor for Hispanic students (Hernandez, 2000; Oliver et al., 1995) and that all types of financial aid influence their decision to attend school (St. John & Noell, 1989). The finding also reinforces the literature that financial aid is linked to

persistence of Hispanic students (Hu & St. John, 2001; St. John et al., 1994; St. John et al., 1996). Finances are an area of concern within the Hispanic student culture. Of particular concern for this sample was a slight economic recession ongoing at the time of the study. This recession resulted in increased unemployment in the local metropolitan area. In light of this economic downturn, perhaps the Hispanic students experienced increased concerns about finances. The majority of Hispanic students indicated that they need financial aid and plan to attend full-time. Full-time attendance is more expensive than part-time attendance and the financial burden is also greater. The increased need for financial aid by those attending full-time is therefore substantiated.

However, only 12.5% of students indicated that financial aid is one of their three most important reasons for attending UNT. Although the majority of students indicate they plan to use and must have financial aid to attend UNT, a minority of students believe financial aid influences their decision to attend. The response concerning financial aid usage provided by the Hispanic students in this study could be a standard response that any student would give if asked if they would like financial assistance. Since finances are a concern for most students, one may assume that a large number of students would indicate they want and need financial aid simply because it was offered as an option. Another possible explanation is that a low number of students had actually received their financial aid packages at the time of the survey. If a small number of students had received financial aid, one would not expect a large number to say they chose UNT due to financial aid. One must then ask if these students were already at risk of attrition due to lack of financial aid awards. This is a possibility considering the emphasis placed on the need for financial aid. However, the persistence rates of the

Hispanic students, in comparison with the population at-large, does not seem to differ regardless of their financial aid plans.

Research Question 7

Persistence and Graduation Rates of Undergraduate Hispanic Students

Graduation rates are used as an indicator of the persistence of undergraduate Hispanic students. Persistence of undergraduate Hispanic students is an important indicator of the university's ability to retain this group of students. The persistence rates for undergraduate Hispanic students at UNT are comparable to those of the larger undergraduate population. This result indicates that while the six-year graduation rate may not be as high as preferred by UNT, the undergraduate Hispanic student population is continuing and graduating at a rate comparable with the at-large undergraduate student population. Perhaps this is because the experience of Hispanic students is one that is comparable with the experience of all UNT students.

Another rationale for the similar graduation rates is the programming available to the Hispanic students at UNT. Since the majority of the students in the sample were transfer students who had been academically successful thus far, those students likely received programming at their previous institutions that assisted in their persistence and success. It appears that UNT is offering the same supportive programming and environment to undergraduate Hispanic students. Furthermore, Hispanic freshmen must also be receiving the same type of support thereby promoting their persistence as well. Academically supportive programs provide Hispanic students with opportunities for success and therefore assist in their persistence to graduation. Additionally, since diversity is important to a sense of belonging among Hispanic students (Helm et al.,

1998; Hernandez, 2000; Hurtado, 1994; Mendez-Caitlin, 1995; Padilla et al., 1997; Suarez & Fowers, 1997), the UNT campus is diverse and provides Hispanic students with a cohort of other Hispanic students with whom they can affiliate.

Hispanic students' families can also influence persistence. If the parents assume their children will attend and succeed in school, then their influence could also encourage persistence. The students in this study indicate their parents do influence the academic decisions they make, so their parents could be encouraging decisions relating to academic persistence as well.

Research Question 8

Who Influenced Academic Decisions

Study data show that of the categories rated as a "significant influence," "mother" and "father" received the highest number of responses. Previous research indicates that the people most influential in the academic decisions of Hispanic students are their families (Hernandez, 2000; Mendez-Caitlin, 1995; Nora & Cabrera, 1996; Quevedo-Garcia, 1987; Rendon & Valadez, 1993; Weissman et al., 1998). This influence on academic decisions could be due to the respect Hispanic children give their parents. This result is inconsistent with earlier results in this study in which students rated parental influence as the least influential on their choice of major. However, parental influence is also a byproduct of the values instilled within the students. Being raised as part of a family provides the opportunity for values to be learned as taught by the parents. These values will influence decisions made by the students during their lifetime. Therefore, although the students do not credit their parents with directly influencing certain decisions, those values instilled by their parents certainly exert some

type of influence. The recognition that parents influence academic decisions also indicates that although the students may not credit their parents with influencing their individual decisions concerning higher education, they do recognize that their parents are influential overall.

Faculty and teachers were credited with providing “some influence” on academic decisions. Faculty was cited in the literature as asserting influence on undergraduate Hispanic students (Helm et al., 1998; Hernandez, 2000; Hurtado, 1994; Hurtado et al., 1996; Mayo et al., 1995; Nora & Cabrera, 1996; Rendon & Valadez, 1993). However, other research indicates that faculty members are not important resources among Hispanic students (Weissman et al., 1998). Undergraduate Hispanic students at UNT report that faculty provide “some influence” on their decisions. Because the majority of students in the sample were transfer students, “faculty” were assumed to indicate faculty members at the students’ previous institution of higher education. Since these students are new to UNT, it is unlikely that the faculty exerting the “influence” were on the UNT campus – at least not yet. However, most of the students completing the new-student survey were transfer students, which indicates they had positive experiences with faculty at other institutions of higher education. It is important to note that faculty do influence Hispanic students. The time spent with faculty at school is a determinant of persistence and success among Hispanic students.

The finding that undergraduate Hispanic students at UNT believe friends exert “no influence” on decisions is surprising. High school friends exert influence on Hispanic students either toward or away from college attendance depending on whether they, too, are attending college (Christi & Dinham, 1992). Other researchers found that

friends provide support, are resources for information (Weissman et al., 1998), and encourage success (Hernandez, 2000). Also, attending school within a close proximity to their friends influences the persistence of undergraduate Hispanic students (Christi & Dinham, 1992). The finding of this study indicates that friends do not exert this influence on the undergraduate Hispanic students at UNT. These results could indicate the Hispanic students at UNT are more independent of their friends than others in the research literature. The independence gained by their previous college experience allows the students in this study to remove themselves from the influence of past friendships on their decisions. Additionally, in light of the other concerns of Hispanic students, this finding suggests that Hispanic students find others more influential in their decisions. Family is definitely considered a much higher source of influence in the literature, and the results of this study indicate the same. Therefore, students may be realizing that to meet their own responsibilities and their responsibilities to their families, they cannot base decisions strictly on their friends. Another possibility could be that friends who would be able to exert academic influence on Hispanic students are held in such high regard that they are seen as family. In this case, the question asking about friends could have held a different meaning to the students in the sample, one that was not defined by the researcher.

Who/What Influenced Choice to Attend UNT

When it came to the decision of where to continue their educational career, none of the figures providing influence on general decisions offered the same influence in the students' choice to attend UNT. Hispanic students themselves make the decision concerning selection of a higher education home; "parents" were the second most

frequent response concerning source of influence. This finding provides insight into the UNT undergraduate Hispanic students: they are, or at least claim to be, the person making the decisions concerning where they will attend school. This finding supports the Student Attrition Model of Bean (1980). Within his theory of student attrition, Bean proposed that students themselves shape their own intentions to stay or persist in school. This indicates that undergraduate Hispanic students at UNT are responsible for shaping their own decisions concerning their educational careers and are more independent than those included in previous research.

Since the majority of undergraduate Hispanic students matriculate at UNT from the DFW area, the student may feel independent, but in reality their parents exert a great deal of influence indirectly. Although the students do not give credit to their parents for influencing their choice of school, it is possible that there is parental influence in this choice due to the proximity of the campus to their homes. Students have been instilled with feelings of responsibilities to their family. To maintain these responsibilities, students believe they should remain close. Thus, this feeling of responsibility influences the students' choice of school based on its proximity to their families. Students believe they have made the decision to attend UNT themselves, but in actuality they may be reacting to values taught to them by their parents.

However, since a large number of undergraduate Hispanic students are transfer students, perhaps they are more independent due to their prior higher education experiences. Literature has indicated that attending and bonding with a school can promote feelings of independence from family. Transfer students in this study, who supplied a majority of the responses, may indeed possess that independence and

therefore attribute more of their decisions to their own influence. Furthermore, the age of the transfer students may be such that will preclude them from parental influences. If the students completing the survey were of an age that precludes them from parental influence, their answers would not indicate that their parents were influential in their decisions.

Research Question 9

Emotional Support Given and Interest in College Success

Even if parents do not select the students' educational home, encouragement by parents to seek and complete higher education is influential in Hispanic students' ultimate decision to attend whichever campus they select. The majority of undergraduate Hispanic students at UNT believe they are encouraged by their families to attend college. This finding supports the research that the families of undergraduate Hispanic students provide a major influence on the students' decisions to attend (Olivas, 1986; Weissman et al., 1998). Further, in this study one gender did not receive more encouragement than the other, and a majority of females and a majority of males indicated that their families are "very interested" in their educational success contrary to results from previous studies (Rendon & Valadez, 1993).

A possible explanation of the overall results is that because the majority of students completing the survey were transfer students, these students experience more encouragement from their families than freshmen. Parental support is a factor that influences Hispanic students to persist in their college endeavors. Transfer students are certainly students who have persisted. Since most of the students are transfers who have persisted through the transfer process and thus, according to literature, must have

supportive families, this could explain why most students believe they are encouraged to attend college. If the sample had consisted of a majority of freshmen students, the results may not have been the same. However, of parents living within the urban environment, approximately half have attended institutions of higher education themselves are more likely to support their children in their academic endeavors. The other half of parents must also be encouraging their children to attend as well for a majority of students to answer as they did. The parents must understand the advantages of higher education and want for their children the increased opportunities for success that higher education offers.

Research Question 10

Reasons Students Choose the University of North Texas

Knowing that their parents support their desire to seek higher education, Hispanic students are left with the exercise of selecting the appropriate school for them. The Hispanic students in the study cite a number of reasons as influential in their choice to attend UNT. Some of the reasons exert more influence than the others, however. The findings of interest are discussed below.

The two most frequently selected reasons Hispanic students cited concerning why they chose to attend UNT were “academic majors” and “academic reputation.” Since Hispanic students have been linked to certain majors, the availability of those particular majors could persuade a student to select a particular university (McJamerson, 1992). The results of this study indicate that the undergraduate Hispanic students choosing to attend UNT did so because of the majors UNT offers. In conjunction with the indication of “academic majors,” the finding that “academic

reputation” is highly selected could indicate that the undergraduate Hispanic students at UNT not only prefer the majors, but also respect the reputation of those academic fields. These results could be indicative of the marketing being conducted by UNT in the local area and conducted through electronic media available to the students. The academic majors and reputation of UNT are being distributed to the Hispanic student market by way of personal recruitment activities, limited television and radio advertisements and through Internet sites. Students’ use of the Internet has particularly expanded opportunities for the exchange of information between institutions of higher education and students. Increased marketing concerning academic reputation of programs at UNT appear to have reached their target audience and influences the students’ decisions. The factors of “academic major” and “academic reputation” on the students’ decisions to attend an institution may also be attributable to their emphasis on receiving a “quality education.” Since Hispanic students are concerned about cost and select majors due to the financial stability they hope to obtain, the availability of highly reputable academic programs ensures the students will achieve the quality education for which they are paying. Not all Hispanic students have the finances available or the spare time to spend on an education that will not be beneficial to them. They put a great deal of priority on the attainment of a quality education: one that will provide them with the utmost possibility of success and financial stability in the future. The academic reputation of a school and its majors is one of the very few indicators available that might gauge the opportunities for success based on attainment of a particular degree. Therefore, the factors of major and reputation are very important to Hispanic students in their efforts to select a higher education home.

The indicator, “parents wanted you to,” was one of the least frequently selected reasons students chose to attend UNT. This is not consistent with the literature, which indicates that parental influence is a large determinant of the students’ selection of a school. Perhaps this result is due, once again, to the independent nature exhibited by the students in this study, whether attributable to their urbanization or to their prior higher educational experiences. Quite likely is the suggestion that although the students do not give credit to their parents for influencing their decision to attend UNT, their parents, through the values they have instilled within their children, recognize the need for a quality education that can provide for a financially stable future.

Cost, as measured by tuition and fees, deters student enrollment as it increases (Kaltenbaugh et al., 1999), and financial aid/scholarships can influence student persistence in college (Hernandez, 2000; Hu & St. John, 2001; Kaltenbaugh et al., 1999; Oliver et al., 1985; Padilla et al., 1997; St. John, 1991; St. John & Noell, 1989; St. John et al., 1996). Since the literature indicates that the high cost of tuition may deter Hispanic students’ enrollment, and since cost is a reason students indicated influences their decision to attend UNT, the cost of attending UNT must provide a positive influence on the enrollment of Hispanic students. Therefore, Hispanic students who matriculate at UNT must consider UNT’s cost to be affordable. If this is true, increasing the cost of attending UNT without the addition of more financial aid funds could be detrimental to the Hispanic students at UNT.

Financial aid, however, was one of the least selected factors in motivating students to choose UNT. Although Hispanic students indicated an elevated need for financial aid, they do not select UNT based on this aid. An explanation for this could be

that the students had not received their financial aid packages at the time of this study, or their financial aid packages had been awarded but were not substantial enough to make a difference in their decision to attend. Perhaps the cost of UNT is such that the students believe they can enroll even without predetermined financial aid packages, but finances remain a concern for their further enrollment and threaten their possible persistence to graduation.

A little over half of the students selected “proximity to home” as a reason why they elected to attend UNT. These results match the findings of previous research. Location can influence the students’ selection of a university, particularly when measured by proximity to home (Christi & Dinham, 1992; Quevedo-Garcia, 1987). It is probable that UNT’s proximity to home gave the Hispanic students security in that they remained close to their families. This facilitates in the students’ adjustment to an independence from their family without completely removing family availability. It also provides opportunities to remain involved with their family responsibilities and still attend school. An interesting factor is that although half of the students select UNT because it is close to home, a quarter of the students select UNT to get away from home. A possible explanation behind this answer is the opportunity to leave their home and families, yet remain close by.

Extracurricular organizations can promote a sense of belonging, thus influencing persistence of students (Christi & Dinham, 1992; Hernandez, 2000; Hurtado et al, 1996). However, this study indicates that the undergraduate Hispanic students at UNT do not place a high value on extracurricular activities when choosing to attend UNT, nor do many of them consider this factor to be one of their top reasons for attending.

However, “social life” was selected by just under a quarter of the students as a consideration. Perhaps extracurricular activities do not influence attendance because these are new students to campus who do not know what activities are available. Another possible explanation may be that extracurricular activities require additional funds. Since Hispanic students are concerned about finances, they may see extracurricular activities as luxuries they cannot afford or do not wish to finance. Further, the time needed to be involved in extracurricular activities could preclude the students from meeting their family responsibilities or interfere with employment. Social life, on the other hand, may be measured as a function of family. Therefore, since Hispanic students are very involved with family, the mention of “social life” as a factor in their decision to attend UNT could indicate the students are close enough to their families to remain involved with them.

Research Question 11

Graduation Hindrances

Even with all the support received and the elements that attract Hispanic students to the school, Hispanic students attending UNT still fear that barriers exist preventing their persistence to graduation. Major reasons for dropping out prior to graduation are either personal and/or economic in nature (Sanchez et al., 1992). A majority of Hispanic students intend to graduate from UNT. The most frequently selected factor hindering graduation was “finances.” Finances are seen as a problem the students have to overcome in order to persist (Hernandez, 2000; Padilla et al., 1997). The students in the UNT study expect to experience the same barriers as do those cited in the literature. Financial concerns were mentioned as a factor for several

of the characteristics measured by the students in the sample. Finances are seen as an issue for those enrolling, as evidenced by the students reporting they plan to use financial aid and need it to stay enrolled. Perhaps, the financial barrier was due to the economic recession occurring, which makes finances a concern for many people. Another possibility is the increasing cost of tuition. Perhaps the students had learned of, or experienced, tuition increases and are concerned about another impending tuition increase. Any one, or a combination of, these financial factors could hinder Hispanic students' persistence to graduation.

The second most frequently selected factor hindering persistence to graduation was "family responsibilities." Students who persist in college are the ones who have relinquished their dependence on their family to the independence of college life (Christi & Dinham, 1992). It is possible that the Hispanic students' experiences at UNT might lessen their dependence on family, thus promoting their chances to persist to graduation. New students have not had time to bond with UNT and thus still experience strong ties to their families. Students enrolled at UNT are largely from the local metropolitan area; they are likely to continue to be involved with their families at home. This continued involvement and lack of bonding to the university campus could substantiate the students' feelings that family responsibilities could hinder graduation. Once the students are more integrated into campus life and develop the opportunity to disengage from their families' influence, they might feel less pressure to assist with family matters. However, family dedication is an ever-present phenomenon within the Hispanic culture and it may not be possible to eliminate this feeling of responsibility.

Conclusions

The following are conclusions about the UNT Hispanic student population based on the findings of the current study. Due to the single institution nature of this study, the findings can only be generalized to the population at the University of North Texas and only to the specific population studied.

Matriculating from mainly within Texas, specifically the Dallas and Fort Worth/Arlington metropolitan statistical areas, undergraduate Hispanic students are more independent than those from previous research literature. The urbanization of these students portrays a reason why these students are more dependent upon themselves and less dependent on their parents. Students have the opportunity to take part in extracurricular activities through their high schools and to pursue after-school work possibilities. Whereas students outside urban areas might not have the opportunity to find a multitude of work possibilities, these urban students can work at restaurants, malls, office buildings and in other more professional white-collar positions. Students living in more rural environments do not have the same work opportunities available to them and might be more likely to take blue-collar jobs and less likely to pursue advanced education. Work opportunities help mature the students and introduce them to a world of possibilities in the white-collar, rather than blue-collar, professions.

Approximately half of undergraduate Hispanic students at UNT are transfer students. This is another factor indicative of living within the Dallas/Fort Worth (DFW) metropolitan area. Within the DFW area, made up of Dallas, Tarrant, Collin and Denton counties, are fifteen different community college campuses from four different community college districts. As shown in the literature, a majority of Hispanic students

elect to enroll at community colleges before transferring to senior institutions (Wilds, 2000). Due to the availability of community college facilities within the local area, a large number of Hispanic students may have attended one of these campuses before transferring to UNT. The potential success of Hispanic transfer students is increased by the fact that they have already navigated and successfully completed semesters at other schools. The heuristic knowledge acquired concerning attendance promotes the students' opportunities for success within the higher educational system (Padilla et al., 1997). Having attended a prior school and successfully transferred to UNT, these students have acquired the knowledge necessary to provide for their own success. Additionally, in order to meet the transfer requirements for UNT, these students have grade-point averages that indicate they have the educational background to succeed. Thus, although poor academic preparation might bar Hispanic student matriculation (St. John, 1991), Hispanic transfer students enrolling at UNT have completed the proper academic preparation to increase their potential for success.

The majority of Hispanic students matriculating at UNT within an academic year are freshmen, by a slight margin. Freshmen students arrive at UNT without prior higher education experience and many arrive without the heuristic knowledge needed to successfully navigate procedures for admission, financial aid, and academic success due to the fact that approximately half of these students were "first-generation college students." Although approximately half of the parents of undergraduate Hispanic students have not attended college, the other half have at least some prior higher education experience. This fact, a unique characteristic of Hispanic students at UNT, is beneficial both to the students and to the university. The students are benefited by the

knowledge of procedures and guidelines their parents have acquired and through their parents' understanding and belief in the value of higher education.

Because approximately half of the parents completed at least some college, they are more supportive of their children who attend college. The majority of Hispanic students believe they are encouraged to continue their education after high school and that their families are interested in their academic success. Previous literature indicates that male children might receive more encouragement and support than female children, but that is not the case at UNT; the two genders receive support equally. The encouragement and support provided by the parents in this study offer one of the strongest indicators of persistence among undergraduate Hispanic students. Students receiving academic encouragement are less likely to be pressured by their families to uphold their duties at home at the expense of their educational pursuits. University administrators do not have to spend time and effort enlightening these parents regarding the benefits of higher education and instead can spend the time and effort on including the families in university activities.

Parents do influence decisions made by their children; however, the students themselves make the decision to attend UNT. Parents, if unhappy with the school, may affect the students' decision to stay.

It can be concluded that UNT's cost is competitive or at least attractive to Hispanic students in comparison with other colleges and universities. The cost of attending UNT is a factor that positively influences the decisions of Hispanic students' to enroll. Even with this attractive cost, finances are still a concern for Hispanic students. Hispanic students plan to use financial aid while enrolled and believe that without

financial aid they cannot stay enrolled. Further, finances are seen as a barrier for their persistence to graduation.

Hispanic students choose to attend UNT due to the academic majors available, UNT's proximity to their homes, the academic reputation of the programs and the university, and UNT's cost. The factors of academic majors and academic reputation as reasons to attend school are unique to Hispanic students at UNT as compared with previous literature. This discovery highlights an important credential for UNT: Hispanic students appreciate UNT's academic reputation and academic majors offered.

Undergraduate Hispanic students at UNT weigh their selection of a school to attend on the strength and availability of the majors they are interested in pursuing.

Undergraduate Hispanic students select majors from within the field of liberal arts or education depending on the gender of the students. It appears Hispanic females will be heavily concentrated within the College of Education. Hispanic males tend to select fields within the liberal arts. The selection of the majors chosen by Hispanic students is based on the students' interest in that major and the opportunities for financial stability provided by careers associated with that major.

Undergraduate Hispanic students at UNT appear to be unique as compared to those in previous literature. They are not as influenced by their parents, yet still have family demands and financial constraints that can hinder their pursuit of higher education. The genders enroll at UNT equally and both receive family support equally. UNT is successfully retaining Hispanic students, at least at the same rate as it retains the general population. However, the percentage of Hispanic students enrolling is still less than that in the Dallas/Fort Worth population. Once recruited, Hispanic students

seem to fare as well as the general population in their retention and persistence to graduation. However, Hispanic students believe that finances or family responsibilities can ultimately hinder their possible graduation.

Recommendations

Recommendations for the University of North Texas

Statewide recruitment efforts should be continued to reach the greatest number of Hispanic students considering UNT for their future higher education. However, concentrating recruitment efforts within the local metropolitan area is also vital to the successful recruitment of a majority of the undergraduate Hispanic students matriculating to UNT. It is a combination of local recruiting and statewide recruiting that makes up the undergraduate Hispanic student body at UNT. To ignore either area will put UNT at risk of losing a large number of future students from this particular population.

UNT has done a good job of recruiting Hispanic students to the campus, even though the overall percentage of Hispanic students at UNT does not match the percentage of the Hispanic population in the counties surrounding the UNT campus (Texas Higher Education Coordinating Board, 2002; US Census, 2000). As statewide recruitment efforts continue, special attention should be given to the local metropolitan area, particularly the high schools and community colleges, to reach the majority of the Hispanic students considering matriculation to UNT. Special programming should be provided to predominantly Hispanic high schools to address the potential for higher education in the area and to advise students and their parents on how to navigate the procedures necessary for enrollment. Once the students enroll at UNT, opportunities for

continued informational programming concerning college success would be advantageous.

Perhaps expanding the recruitment efforts of Hispanic students at community colleges would allow UNT to draw a larger Hispanic transfer population. Although information was not gathered regarding the type of transfer institution, the fact that these students transferred allows conclusions to be drawn about this group. For instance, to get as far as they have, Hispanic transfer students must have a “motivation to persist,” a “commitment to attend” and “intent to transfer” (Kraemer, 1995; Solis, 1995). This motivation and commitment needs to be fostered while the students are at the university in order to assist in the students’ persistence to graduation. Working with community colleges to inform the Hispanic students of opportunities to transfer and services available would help promote the transfer of Hispanic students to UNT. Collaborative efforts between community colleges and universities that address the needs of Hispanic students; such as information about how to transfer, how to receive financial aid, opportunities for the study of specific majors, and career opportunities available to those completing the bachelor’s degree could encourage successful transfer and persistence to graduation. To provide Hispanic transfer students the opportunity for continued success, UNT should attempt to offer the same types of programming as community colleges adjusting for an enrollment size of 30,000 students. In addition, UNT should look to new programming ideas unique to the environment of the senior institution. With continued support, these students can continue to flourish while enrolled at the university.

Orientation programs will be of extreme importance in providing the new undergraduate Hispanic students the information they need to successfully navigate the UNT campus, procedures, and guidelines. To support undergraduate Hispanic students, especially Hispanic freshmen, administrators need to assist the students in gathering the heuristic knowledge necessary that can promote success in their academic attempts and in overcoming potential barriers. According to the research by Padilla et al. (1997), students need the knowledge of how to overcome discontinuity barriers, lack-of-nurturing barriers, lack-of-presence barriers, and resource barriers in order to persist and be successful in the college environment. Thorough orientation programs outlining the campus environment, procedures for registration, course advisement, and services available will help the Hispanic freshmen and transfer students acquire the information necessary to begin successful academic careers at UNT.

To increase opportunities for student success, the parents of the Hispanic students should be included in programming and invited to join in university activities. The need for programming to help inform families about the importance of higher education or the need to support their students would not be as necessary since the majority of students have families providing interest and support. However, programming that involves the families of the Hispanic students while those students are enrolled at UNT can help continue that familial support. The involvement of Hispanic parents can only help to increase the support toward their children's academic endeavors. Further opportunities for mentoring, tutoring, and career exploration will be necessary in maintaining the students' commitment to attend and persist to graduation.

Certain academic majors are related to undergraduate Hispanic students enrolling at UNT. Not only do the Hispanic students select certain majors, but the students also indicate that their decision to attend UNT is based on the academic majors and the academic reputation of the university. Further, the Hispanic students indicate that they select their majors based on “self-interest” in the major and “financial stability” of the career.

Colleges, schools, and departments within UNT should be alerted to the concentration of Hispanic students within their majors. Departments housing the majors primarily attracting undergraduate Hispanic students should seek ways to provide support services to assist in retention. Knowledge that certain majors attract students can assist departments in coordinating student success programs such as mentoring and tutoring to help foster Hispanic students’ abilities to succeed in their studies. In addition, this knowledge can help the departments in their student recruitment planning. Departments that do not attract Hispanic students should consider marketing their programs to this population, sharing both the academic reputation of their programs as well as the financial possibilities for students working within that field. Career exploration programs and informational fairs about the different majors available might also provide ways to increase the knowledge of the majors available among the undergraduate Hispanic students.

The College of Education should be aware that although undergraduate Hispanic females select education majors more frequently than any other major, past research indicates that these students do not persist to graduation (McJamerson, 1992). Mentoring and tutoring are two possible programs that might help in the successful

persistence of Hispanic females. Likewise, departments attracting Hispanic males will be better able to assist those students if they are aware of this Hispanic student interest. Retention and academic support programs will be beneficial to this group of students as well.

Since the Hispanic students base their decision to attend on UNT's majors and academic reputation, marketing information concerning the majors available and the academic reputation of UNT can be of benefit in attracting more Hispanic student interest. Informational brochures or websites outlining the majors available and the reliability of these programs for providing career opportunities will address the interests of undergraduate Hispanic students. Career exploration programs and programs explaining the different majors and opportunities within each will provide students with additional information pertaining to the employment opportunities available after graduation.

Most Hispanic students plan to use financial aid and report that they must have financial aid to attend. Therefore, financial aid procedures and packaging should be examined to insure that adequate services are being provided to Hispanic students enrolling at UNT. Guidelines and procedures for filing financial aid paperwork are important information for Hispanic students and their families. Since many of the Hispanic students' parents have no prior higher education experience, it is likely they do not understand financial aid procedures. Presentations while the students are still attending high school will be the most direct and time appropriate way to provide this type of information to the students and their parents. Special attention should be given to the language needs of the audience; the parents of these students may be better

served by presentations given in Spanish. Administrators should also examine the procedures in place for awarding financial aid. Timely packaging could be a determinant as to whether Hispanic students elect to attend UNT.

Hispanic students indicated that diversity is a consideration in their choice to attend UNT. However, administrators should not become complacent but should continue to promote diversity. To continue to promote diversity on campus, administrators should create a supportive environment for minority students, develop programs that will improve the campus environment, implement an agenda that includes clearly defined goals for increasing diversity, and increase understanding and appreciation of differences associated with culture and characteristics of students of all ethnicities (Walters, 1996).

Offering flexible course times and degree programs that allow students to address family and work responsibilities may be one way of addressing that barrier to graduation. Through flexible course offerings, students might be able to work and go to school at the same time. This will allow students to contribute financially to their families and increase their financial stability while furthering their education. Availability of day-care on campus is another potential program that might help meet the students' family responsibilities. Through a day-care program, students could attend classes and still have adequate and affordable care for their children. Programs like these might assist the students in meeting their family responsibilities, and in turn, reduce the threat of these barriers preventing successful persistence to graduation.

Recommendations for Higher Education

Studies examining undergraduate Hispanic students must continue. The results of the current study indicate a shift in some of the influences experienced by undergraduate Hispanic students, especially parental influence. To determine if this shift is specific only to this particular sample, or if it is the beginning of a shift for the entire population, additional research should be conducted.

American secondary school programs often include pre-college planning activities, which prepare students for continued education beyond the secondary level. Activities such as these promote intention to graduate and allow students to consider continuing their education after graduation instead of immediately joining the workforce. These programs may influence Hispanic students to consider higher education as an opportunity whereas their parents may not have. As increased numbers of Hispanic students take advantage of the opportunities of postsecondary education, they are becoming role models to the younger Hispanic students in school – something that was not readily available to Hispanic students in the past. Further research should examine the hypothesis that the Hispanic student population is being introduced to the opportunities of higher education through their secondary school attendance and are being provided more support from their parents and more role models to follow than those Hispanic students studied in past research.

Higher education would be wise to address the needs not only of Hispanic students, but also of their parents. By reaching out to the parents of Hispanic students, higher education can promote opportunities for both the students and the parents to obtain additional training and thereby provide additional career opportunities. As the job

market becomes more competitive, educational opportunities can assist in providing the Hispanic population the critical tools necessary to compete. This will, in turn, provide a more educated workforce and an increased financial earnings base.

Undergraduate Hispanic students indicate they make academic decisions based on their own preferences. Higher education should increase marketing among these students to provide them with pertinent information concerning institutions of higher education. Increasing the exchange of pertinent information between the institutions and the undergraduate Hispanic students could enhance the knowledge of opportunities available to the students.

Recommendations for Further Study

To add to the body of research presented by this study and to further validate the findings, the researcher recommends the following opportunities for further study.

1) A replication of the current study should be conducted on new undergraduate Hispanic students matriculating within an academic year to determine if the findings of the current research are representative of the entire new Hispanic student population or are simply characteristic of students matriculating to UNT in the spring.

2) The sample of students for this study was drawn from new students to the university for the spring 2003 semester. Additional studies should be conducted concerning the same topics using the entire currently enrolled undergraduate Hispanic student population in order to ascertain the results of the research questions on currently enrolled students.

3) Broaden the study to include other ethnicities so that perceived differences between the populations may be explored and examined.

4) Additional studies replicating the current study should be conducted at other institutions of higher education within Texas. By conducting additional, multi-institutional studies, a definition of the undergraduate Hispanic student population for Texas could be generated and provide information for the entire state concerning the undergraduate Hispanic students seeking higher education.

5) Qualitative studies utilizing focus groups or interviews should be conducted to derive more detailed responses to the research questions.

6) Studies concerning the characteristics of undergraduate Hispanic students enrolled at community colleges would provide opportunities to explore the differences between those that enroll at community colleges versus those matriculating at the senior institutions as freshmen.

7) The current study indicated a more independent Hispanic student emerging at UNT. Additional research should be conducted to test if this is an emerging characteristic of undergraduate Hispanic students.

8) Additional research should test the results of this study by examining mostly urbanized, undergraduate, transfer Hispanic students against the characteristics of freshmen Hispanic students and non-urbanized Hispanic students. The variable of transfer student, urbanized student, or both may have skewed this study to create the unique results exhibited. Further studies could examine these variables concerning how they affect the characteristics of undergraduate Hispanic students.

Ongoing research is needed concerning undergraduate Hispanic students. Research in this area is still limited and, based on the results of this study, the known characteristics of these students may be changing. Since the current study was

conducted within a single institution, the findings cannot be generalized to the larger population. However, the results raise questions concerning the characteristics of undergraduate Hispanic students and researchers should continue to study this emerging population.

Appendix
New-Student Survey

New Student Survey

University of North Texas

Male _____ Female _____ Age _____ Ethnicity _____

Marital status _____ Hometown (city and state) _____

Beginning Freshmen (no previous college work) _____ Transfer student _____

Semester hours planned to take this spring semester _____

1. What level of education have your family members achieved? Please check all that apply. The first line is an example. Under the heading siblings (sisters & brothers) please check the columns that apply to each of them. Professional school refers to medical or law school.

Family member	Elementary		High School		College		Graduate School		Professional School	
	Some	Grad	Some	Grad	Some	Bachelors Degree	Some	Grad	Some	Grad
Example		X		X	X					
Mother										
Father										
Sibling # 1 age:										
# 2 age:										
# 3 age:										
# 4 age:										

2. Which one of the following best describes the situation in your family when you were in high school? Please check only one answer.

_____ It was naturally assumed that I would go to college.
 _____ I was encouraged to attend college, but it was not assumed that I would go.
 _____ I was neither encouraged, nor discouraged, to attend college.
 _____ I was discouraged from attending college.
 _____ Other: Please explain _____

3. How interested is your family in your grades?

_____ Very interested _____ somewhat interested _____ not interested

4. What is your anticipated academic major? _____

5. What is your anticipated career/occupation? _____

6. Why have you chosen this career? Please check all that apply.

- | | |
|--|---|
| <input type="checkbox"/> financial stability | <input type="checkbox"/> self interest |
| <input type="checkbox"/> improve community | <input type="checkbox"/> parental influence |
| <input type="checkbox"/> improve society | <input type="checkbox"/> friends influence |
| <input type="checkbox"/> prestige | <input type="checkbox"/> other _____ |

7. Which one of the following describes your future educational and/or career goals? Please check one.

- | | |
|---|---|
| <input type="checkbox"/> Graduate school (Masters or Doctorate) | <input type="checkbox"/> Professional school (Law, Medical) |
| <input type="checkbox"/> Work | <input type="checkbox"/> Work and graduate school |
| <input type="checkbox"/> Unsure at this time | |

8. I am using or plan to use financial aid during my college career. yes no

9. Would you be able to attend UNT without financial assistance? yes no

10. Are you currently employed? yes no

If yes, where do you work? on campus off campus

If yes, why are you employed? Check all that apply.

- | | |
|---|---|
| <input type="checkbox"/> pay tuition | <input type="checkbox"/> career preparation |
| <input type="checkbox"/> support family and/or self | <input type="checkbox"/> work study (financial aid) |
| <input type="checkbox"/> spending money | <input type="checkbox"/> other _____ |

11. Who do you think has influence on the decisions you make concerning your life? Place an X in the appropriate box for each person.

Category	Significant Influence	Some Influence	No Influence
Mother			
Father			
High School Friends			
Boy/Girlfriend			
Spouse/ "significant other"			
College Friends			
Faculty/teachers			
Siblings			
Other			

12. Who was most influential in your choice to attend UNT? (You may select an answer from the list given in question #11.) _____

13. Why did you choose to attend UNT? Please check all that apply.

- | | |
|---|--|
| <input type="checkbox"/> social life | <input type="checkbox"/> diversity of campus |
| <input type="checkbox"/> cost | <input type="checkbox"/> proximity to home |
| <input type="checkbox"/> size of college | <input type="checkbox"/> friends enrolled here |
| <input type="checkbox"/> relative enrolled | <input type="checkbox"/> desire to live away from home |
| <input type="checkbox"/> parents wanted you to | <input type="checkbox"/> campus facilities/landscape |
| <input type="checkbox"/> financial aid/scholarship | <input type="checkbox"/> Recommended by HS |
| <input type="checkbox"/> academic majors | <input type="checkbox"/> counselor/college advisor |
| <input type="checkbox"/> academic reputation of college | <input type="checkbox"/> other: _____ |
| <input type="checkbox"/> extra-curricular activities | |

14. Of the choices above, which three were the most important in your decision to come to UNT? Most important _____ Second _____ Third _____

14. Do you think UNT will meet your expectations and needs? ____ yes ____ no
If no, what needs will UNT not be able to meet:

15. Do you plan to graduate from UNT? ____ yes ____ no

16. What factors could keep you from graduating from UNT? (Check all that apply.)

- | | |
|--|---|
| <input type="checkbox"/> finances | <input type="checkbox"/> campus climate/discrimination |
| <input type="checkbox"/> family responsibilities | <input type="checkbox"/> not prepared for college level |
| <input type="checkbox"/> won't fit in/belong | <input type="checkbox"/> work/poor grades |
| <input type="checkbox"/> lack of students "like" you | <input type="checkbox"/> other _____ |

18. As a student at UNT, do you think you will be able to influence the programs and/or policies of UNT? _____ Yes _____ No

19. What is your campus residence status?

live on campus (answer question 20-21) commute (answer question 22)

20. Please check the reason you decided to live on campus (check all that apply).

- | | |
|---|--|
| <input type="checkbox"/> close to campus | <input type="checkbox"/> easier to study |
| <input type="checkbox"/> close to friends | <input type="checkbox"/> home is too far away to commute |
| <input type="checkbox"/> get away from home | <input type="checkbox"/> more fun |
| <input type="checkbox"/> campus social life | <input type="checkbox"/> other _____ |
| <input type="checkbox"/> easier to make friends | |

21. How often do you plan to go home?

- | | |
|--|---|
| <input type="checkbox"/> more than once a week | <input type="checkbox"/> less than once a month |
| <input type="checkbox"/> once per week | <input type="checkbox"/> once per semester |
| <input type="checkbox"/> once per month | <input type="checkbox"/> once per year |

22. Please check the reason you decided to commute (check all that apply).

stay close to friends

parent's wanted you to commute

stay close to family

not ready to be away from home

financial

other _____

23. Do you think you will be comfortable or uncomfortable with the following?

Category		Comfortable	Uncomfortable
Attending classes			
Speaking in class			
Asking your professors for help			
Ethnic diversity on campus			
Asking other students for help			
Dating			
Attending social functions			
"Hanging out" with other	African Americans		
	Anglos		
	Asians		
	Hispanics		
	Students of other ethnicities		
Ratio of male to female students			
Student to teacher ratio			
Going against your parents wishes			
Disagreeing with your peers			

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