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Factors Associated with Successful Hispanic Students in Higher Education

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Factors Associated with Successful Hispanic Students
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DEDICATION

With all my love to my daughters, Ana, Laura, and Lucy; and my grandchildren:
Michael, Noah, Emma, Abbie, Andrew, Kai, Hannah, Mary, Jonah, and, the others who
may come. This is my legacy to you of my passion for education and for issues
concerning Hispanics, the culture you all have inherited. God bless you!

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Abstract

The Hispanic population in the United States already constitutes the fastest

growing minority group in the United States and by the year 2050 this group will

constitute 24% of the total population and one fourth of the national workforce. Because

this is a very young population whose median age is 27.2 years old, the education of this

group is pivotal to the future of this nation. The purpose of this study was to examine the

perceived importance of personal and external factors found in the literature as significant

in Hispanic college success for a sample of 137 Hispanic college seniors from four public

higher education institutions in Florida.

This mixed method study used an instrument containing 13 demographic

variables, 61 quantitative items, and 5 qualitative questions. The information gathered

from the demographic items revealed a relevant data characterizing the participants as

first, second, and third generation immigrants or Hispanic Americans with a diverse

Hispanic background. They also belonged to middle and upper income households with

at least one college educated parent.

The results from the descriptive analysis of the quantitative data from the survey

indicated the students in the study had a strong *desire to succeed*, perceived a strong

parental support and a *supportive campus environment*, and had a strong

academic preparation to attend college. All these factors were corroborated by the

qualitative results.

The recommendations for future studies and practices should include a greater

understanding of the important role a supportive family and institution play in the

academic success of Hispanic students. More research is recommended on the family-

student relationship and its effect on students. Reaching out to Hispanic parents and families and ensuring their participation in campus events, as well as increasing institutional support with the outreach and hiring of Hispanic faculty are two specific recommendations worthy of consideration in the effort to ensure greater success for Hispanic students.

CHAPTER 1

Introduction

Hispanic students are graduating from college at a much lower rate than the rest of the population. However, many of them succeed. What are the factors associated with those who succeed? For those who succeed, why is there so little information about their success? Why is the bulk of the research focusing on the failure rather than the success of this group, a group that is so critical to America's social and economic future?

The rapid demographic increase of Hispanics is affecting the nation's social and economic make-up, and by the year 2050, one fourth of the national workforce will be Hispanic (U.S. Bureau of the Census, 2000a). The future productivity of the U.S. labor force depends to a considerable degree on our nation's ability to provide high quality educational programs for Hispanic young people who will play a vital role in the labor market of the future. In addition, a drop in the average level of education of U.S. workers, of which Hispanics will constitute 25%, would depress personal income per capita in the U.S. and, consequently, the nation's tax base (National Center for Public Policy and Higher Education, 2005).

At present, educational differences explain much of the wage gap between Hispanics and non-Hispanic Whites. The median hourly earnings for U.S. born Hispanics

are 2% less than for non-Hispanic Whites. In the area of information technology, the

wage gap between Hispanics and non-Hispanics is even greater. Although there are twice

as many Hispanics in information technology occupations as in non-information

technology occupations, they earn 62% less than non-Hispanic Whites (U.S. Department

of Education, Council of Economic Advisers, 2000).

With a median age of 27.2 and 45% of its people younger than 18 years old (U.S.

Department of Commerce, U.S. Bureau of the Census, 2004), Hispanics are the youngest

ethnic group in America. Improving the educational achievement of Hispanics not only

will improve the livelihood and earning power of this group, but will also have a definite

impact on the social and economic future of the United States. It will improve the

education level of the workforce to meet the demands of the "information economy" of

this century. The nation may suffer if this increasingly large minority is not provided with

the tools needed to succeed in this changing economy. What will it mean for the nation to

have a growing, significant proportion of the population competing for low-skill jobs and

locked in the lowest socioeconomic brackets? The demand for public social services may

grow as an increasingly larger underclass develops, and the nation's social and political

cohesion may erode as income disparities between ethnic groups in the United States

widen (Sorensen, Brewer, Carroll, & Bryton, 2003). Conversely, higher levels of

education are associated with higher income, higher tax revenues, reduced crime and

incarceration, and better health (Vernez, Krop, & Rydell, 1999).

The current picture of Hispanic educational advancement, however, is somewhat

encouraging. College enrollment rates among Hispanic students in the United States have

increased over the past decade. From 1988 to 1998 college enrollment by members of

this group increased by 85%, the highest growth rate among the four major ethnic minority groups (Harvey, 2001).

Hispanics have also made gains in several key education areas in the past 20 years. In 1998, Hispanic high school graduates earned more credits and took more advanced placement examinations than ever before (National Center for Education Statistics, 2002). But these gains should not disguise the fact that numbers still lag behind those of the other groups. Only 11% of the Hispanic population graduates from college, compared to 25% of non-Hispanic Whites (U.S, Department of the Commerce, Bureau of the Census, 2000b).

Traditionally, some personal and external factors have been considered responsible for the low college success rate of this group. Poor academic preparation (Ballesteros, 1986; Ramirez, 1987); limited financial resources (Muñoz, 1986; Nora, 1990); low family socioeconomics, educational background and expectations (Chrispeels & Rivero, 2001; Esprivalo & Scott, 2003; McCloyd, 1990; Nuñez & Cuccaro-Alamin, 1998); poor relationship with faculty (McJamerson & Larke, 1989; Valenzuela, 2000); and negative perception of campus diversity climate (Flemming, 1984; Hurtado, 1994) have been some of the circumstances contributing to high Hispanic attrition and low graduation rates.

On the other hand, asset-based and resiliency research studies, which focus on individual attributes, assets, and values influencing the achievement of the academically able Hispanic students (Jodry, Robles-Piña, & Nichter, 2005; Mc Millan & Reed, 1994), have revealed the existence of many resilient Hispanic college students who owe their success to personal assets, such as strong motivation, determination, and high self esteem

(McMillan & Reed) as well as other external protective factors such as family, mentors, school counselors, and institutional and community resources (Chawkin & Gonzalez, 2000).

As mentioned earlier, research on those students who succeed is very limited and not much information exists on factors associated with their success. Therefore, it was imperative for the current study to examine whether or not the personal and external factors from the literature were, in fact, associated with the success of a population of successful Hispanic college students in Florida. Specifically, the study examined the relationships among scores on items related to personal and external factors to academic factors, as evidenced by the student grade point average. The personal factors included student motivation, self-esteem, academic preparation, language proficiency, and financial resources; the external factors included family (socioeconomics, immigration status, educational background, and expectations); and the institutional factors included student use of campus services, student involvement in campus organizations, and student perception of campus diversity climate.

The input from the 137 participants in the study provided insights on the issue of Hispanic college success. In addition, the location of the study, the number of factors examined, and the sample size definitely addressed limitations of previous research in these areas, which took place primarily in the west and central regions of the nation, with fewer factors examined, and a smaller number of students participating. By examining four institutions of higher education in Florida, the researcher was able to capture perceptions from a more diverse Hispanic population of 137 students from a variety of

Latin American countries. These successful Hispanic students answered 61 quantitative and 5 qualitative questions related to factors to which they attributed their success.

Finally, focusing on increasing the knowledge about these personal and external factors impacting resilient successful Hispanic students, rather than on factors causing Hispanic attrition, was pivotal for developing more realistic institutional strategies to help other Hispanic college students succeed and improve their so desired graduation rates. The current study contributed to that effort by providing substantial data and recommendations on institutional strategies.

Purposes of the Study

The purposs of this study were (a) to determine the factors associated with the success of Hispanic college seniors in Florida and (b) to address limitations of previous studies on the topic of Hispanic achievement. The existing research is very limited in two areas: first, its focus has traditionally been on the failure of these students rather than their success. In this regard, the purpose of the current study is to contribute information to asset-based theoretical paradigms emerging in the literature which concentrate on other factors that favor the success of this group (Jodry, Robles-Piña, & Nichter, 2005; Padilla, Treviño, González & Treviño, 1997).

Another limitation of the existing literature is that the majority of the research has been conducted in institutions located in the central and western regions of the country. The Hispanic population in these regions is mostly of Mexican origin. Considering the diversity among Hispanics, and the geographical spread of the population throughout

other regions of the country in the last decade, the present study, at four Florida

institutions, contributes a new environmental reality to the existing research.

Significance of the Study

Hispanics are the fastest growing population group in the nation (40% of the

total population growth in 2000). The group is characterized by a youthful age structure

with 27.2 years old being the median age. The education of this group will be crucial to

the future of this nation. Projections from the U.S. Census Bureau indicate that by the

year 2050, Hispanics will constitute one fourth of the national workforce (U.S.

Department of Commerce Bureau of the Census, 2004a). According to the National

Center for Public Policy and Higher Education (2005), "the ability of all states to address

the educational needs of their minority populations is critical for creating a better-

educated workforce, increasing the earning power of their residents, and remaining

competitive with other states and countries" (p. 8). It is for these reasons that the success

of Hispanics in college should constitute a national educational priority.

The success of this group should not only be a priority for professionals in the

field of education, but also for other professionals such as psychologists, health care

administrators and practitioners, and policy makers. These professionals are already

feeling the impact of the rapid growth of this group in the midst of their constituencies

and clientele throughout the nation. Increasing the number of Hispanic professionals

with a better understanding of the realities of this group will help alleviate the existing

pressure experience for the professionals in all these fields

For all the above, it is clear that the academic, political, and economic performance of members of this group will definitely have an impact on the future economic and social make up of America. Therefore, increasing knowledge of factors most frequently associated with Hispanic college success that could generate successful strategies toward college completion in this group constitutes a significant contribution to America's future.

Research Questions

This study addressed the following research questions:

1. What factors from the literature are consistent with those to which successful Hispanic college seniors in Florida attributed to their success?

2. What are other factors to which successful Hispanic college seniors in Florida attributed their success?

3. Are the factors identified by the students addressed in practices at the institutions of higher education in Florida? If so, how are they documented?

Definition of Terms

Hispanic: For the purpose of the current study the term Hispanic will refer to students whose origin can be traced to a Latin American country colonized by the Spaniards and therefore those who inherited the "Hispanic" culture. It could be a first, second, or third generation person living in the U.S. The term is misleading when used to refer to "descendant of Spaniards," because there are many Latin Americans who inherited the Hispanic culture as a result of colonization, but are not necessarily

descendents of Spaniards. There are many Indian and African descendents in Latin American countries. In this sense, the term "Latino" is more appropriate. However, the university data system uses the term "Hispanic" to identify all Latin American descendants; therefore, this was the term used in the current study.

Another important clarification is the fact that Latin America is made up of 20 countries (including Brazil, which is not Hispanic, but Portuguese). They are listed as follows:

North America: Mexico

Central America: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and

Panama.

South America: Argentina, Brazil, Bolivia, Chile, Colombia, Ecuador, Paraguay, Peru,

Uruguay, and Venezuela.

Caribbean: Cuba, Dominican Republic, and Puerto Rico.

Each of these countries has its own culture, language characteristics, music, food, and folklore. Therefore, it is important not to generalize all Hispanics into one ethnic group. Hispanics are a mosaic of cultures.

For the purpose of this study it is also important to indicate the composition of the Hispanic population in the United States according to their country of origin. According to the U.S. Census Bureau (2006), the breakdown by country of origin in percentages is as follows:

Mexico	64%
Puerto Rico	10%
Cuba	3%

Dominican Republic	3%
El Salvador	3%
Other Central and South America	17%

Immigrant: A foreign born individual living in the U.S. First generation

immigrant student refers to a student born outside the United States who resides in the

U.S. and posseses a U.S. citizenship or legal residency status. For the purpose of this

study, international students of Hispanic origin holding a student visa were included in

this group. Second and third generation Hispanic students are students born in the United

States of either one or two Hispanic parents or grandparents.

Motivation: In this study motivation is defined as the desire to finish college.

Resiliency: In this study resiliency is defined as the ability to cope with adversity

and overcome the most challenging circumstances (Hassinger & Plourde, 2005).

Self-Esteem: In this study, self-esteem refers to the person's self appraisal of their

personal worth which is determined through the interactions with others.

Success: For the purpose of this study success is defined as a senior student's

ability to obtain a cumulative grade point average (GPA) of 3.0 or above during the

semester the study was conducted.

Sample

The sample for the present study was a non-random sample of 137 Hispanic

college seniors, with a grade point average of 3.0 or above, from the following four

higher education institutions in Florida: University of North Florida, Jacksonville;

University of Florida, Gainesville; University of Central Florida, Orlando; and Florida International University, Miami. These four institutions were selected based on their percentages of Hispanic students in relation to the total student population (6%, 9%, 12%, and 59% respectively) and the diversity among the population of Hispanic students.

Study Design, Methods, and Procedures

This study employed a descriptive, non-experimental design, and simultaneous, mixed method as a data collection methodology.

The quantitative and qualitative data were collected from the responses to the survey by a convenience sample of 137 participants from the four higher education institutions.

The survey was developed by the researcher with a few items incorporated from the Student Adaptation to College Questionnaire (SACQ, Baker & Syrk, 1984); the Non-Cognitive Questionnaire Revised (NCQ-R, Tracey & Sedlaceck, 1984); General Campus Climate subscale (GCS, Reid & Radhakrishnan, 2003); the College Student Inventory (Stratil, 2006); Rosenberg's (1965) self esteem scale, and the Survey Evaluation of UNF Baccalaureate Graduates (University of North Florida, 2003).

The survey was first tested for clarity, degree of difficulty, length, completion time, and possible inclusion of additional variables in a pilot study with a group of 10 Hispanic seniors at Florida State University. It was also evaluated for content validity by five UNF experts in the field of multiculturalism.

The survey contained 13 demographic variables and 61 additional items containing variables related to the internal and external factors found in the literature. I

used descriptive statistics on the 13 demographic variables to describe the characteristics

of the participants, and to describe results on the remaining 61 quantitative items on the

survey. Those items were grouped under 8 subscales and the means, standard deviations,

and minimum and maximum values for each item were calculated using the descriptive

statistics feature on SPSS. An internal consistency reliability analysis followed to

calculate the Cronbach's alpha coefficient (1951) for each subscale. A descriptive

analysis containing means and standard deviations of the items included on each of the

final four constructs was also completed. Then a correlational analysis was conducted to

determine the degree of association among the four constructs and the dependent variable

(GPA). As a final step, and to determine the significance of the relationship with

the dependent variable, I conducted a multiple regression analysis using the last four

constructs as predictors. In addition to the 61 quantitative items, the survey contained five

open ended questions. Responses from those items added information to each of the final

quantitative results and contributed to a more meaningful interpretation of the data.

Summary

The education of Hispanics is important for the future of the United States. In

2050 they will constitute one fourth of the national workforce; therefore, improving the

educational achievement of this group will reinforce the much needed highly educated

workforce to meet the global competitiveness of the "information economy" of this

century. This study contributed to this effort by examining the personal and external

factors associated with the success of students from this group in the state of Florida.

It also addressed the limitations of previous research by focusing on the students' assets

rather than their deficits, by increasing the number of factors examined and the size of sample, and by providing a different geographical location.

This descriptive non-experimental study used a simultaneous, mixed- method of data collection. The quantitative and qualitative data were collected from a survey completed by 137 participants. It was developed by the researcher with the inclusion of some questions from previous research.

Organization of the Study

This study is organized as follows: Chapter 1 includes a presentation of the purpose and significance of the study, the research questions, the definition of terms, a description of the population and sample, and an overview of the study design, methods, and procedures. Chapter 2 is a review of the related literature with concept, theories, decisions, methods, and procedures from previous research as well as a review of specific literature related to each of the factors considered in the study. In chapter 3, the research design and methodology, research questions, instrumentation, sample, and procedures for data collection are included. Ethical issues and limitations of the study are also discussed in chapter 3. Chapter 4 includes a detailed report of the results of each of the analytical procedures used in the study, followed by a discussion of such results presented in chapter 5. Recommendations for leadership practices and future research are also included in chapter 5.

CHAPTER 2

Review of the Literature

The existing research on Hispanic achievement is very limited and the predominant focus has traditionally been the factors behind the academic failure of Hispanic students. In addition, the majority of the research has been carried out in the middle and western regions of the country, where the Hispanic population is predominantly of Mexican origin, therefore, disregarding the diversity existing among the Hispanic population in the United States. The few studies that focus on Hispanic success are also limited by the use of very small samples making it difficult to generalize to a larger population.

The present study addressed these limitations by focusing on the following features:

(1) Adding information to the recently emerging asset-based paradigms in the literature focusing on Hispanic success by examining a much larger number of factors in a larger sample of successful college students.

(2) Adding a new geographical and environmental reality to the existing research by examining a population within the southeast region of the country.

(3) Addressing the diversity of the Hispanic population with a sample of students from all different Hispanic backgrounds.

The factors associated with the resilient and successful students examined in this study were grouped under two major categories: Personal and External. Each category

included sub-factors considered in the literature to be most influential in Hispanic college student success. Among the personal sub-factors were motivation, self-esteem, academic preparation, language proficiency, and financial resources; the external factors examined included family (socioeconomics, immigration status, educational background, and expectations) and institutional (student's use of campus services, student's involvement in campus organizations, and student's perception of campus diversity climate). The literature examined regarding each of these factors follows:

Personal Factors

The factors considered within the personal (internal) category are those assets consisting of personal characteristics, conditions, and skills present in successful Hispanic college students. Among these assets, particular attention is given to motivation, self esteem, academic preparation, financial resources, and English language proficiency.

Motivation

For the purpose of this study, motivation is defined as the inner desire of the student to finish college. In 2005, Dennis, Phinney and Chuateco, developed a model that established a difference between individual and collectivistic motives. Individual motives are based on personal interest, intellectual curiosity, and the personal desire to attain a rewarding career. Collectivistic motives, on the other hand, are based on the desire to achieve in order to meet the demands and expectations of family members (Markus &

Kitayama, 1991), or to give back and transform their communities (Santos, 2004).

In their study, Dennis et al. (2005) selected a sample of 80 Hispanic and 16 Asians, and because these two cultures are considered collectivistic cultures, they hypothesized that their family motives would be significantly related to the college outcomes of the students. However, to their surprise, no significant relationship was found between college outcomes and collectivistic motives. Only the personal career motivation was related to successful college outcomes. Personal desire to finish college also impacted persistence in a study by Allen (1999), and the impact was only found among minority students (who most largely belong to collectivistic cultures). For non-minority students, personal motivation had no effect on persistence.

Self-Esteem

The terms self-esteem, self-concept, self-worth, and self-efficacy are treated similarly in the literature (Gloria, Castellanos, Lopez, & Rosales, 2005; Grant-Vallone, Reid, Umali & Pollert, 2003; Hernandez, 2000; Rak & Patterson, 1996). In the current study, the term self-esteem is used to refer to the characteristic that is also found to relate to resiliency in successful "at-risk youth" (Arellano & Padilla, 1996; Hassinger &Plourde, 2005; Rak & Patterson), a category most frequently associated with minorities. Students with high self-esteem understand self and self boundaries, take pride in doing high quality work, and adjust better to the college environment (Grant-Vallone et al.; Rak & Patterson). They excel because they have confidence in their cognitive abilities. Resilient students believe they can understand the material and information presented in class and can do well on homework and on tests (Gordon, 1996). Words of

encouragement and meaningful interactions from faculty and staff in and outside of the classroom have also contributed to enhance the students' self-worth and, consequently, their success (Terrenzini et al., 1994) . In Grant-Vallone et al., higher levels of self-esteem were indicative of better academic and social adjustment. In their survey used on a sample of 118 they included two statements from Rosenberg (1965) to measure student's level of self-esteem. The statements read: "I feel that I am a person of worth at least on an equal basis with others," and "At times I think I am no good at all.

Academic Preparation

Academic preparation is a personal protective factor also critical to student success in college, as it provides the necessary background upon which advanced knowledge is built. The level of pre-college academic preparation a student has weighs significantly as an asset on his/her chances of completing college in four or six years (Astin & Oseguera, 2003). According to the U.S. Department of Education (2003), a little over half of first-generation students beginning college with the Core New Basic Curriculum (4 years of English, 3 years of mathematics, and 3 years of science and social studies) obtained a bachelor's degree. However, 81% of first-generation students who took a more rigorous high school curriculum (Core New Basics plus biology, chemistry, and physics; 4 years of math including algebra I, geometry, algebra II, pre-calculus, 3 years of foreign language, and one honors/advanced placement course or advanced

placement test score) completed a bachelor's degree (U.S. Department of Education, National Center for Education Statistics [NCES], 1995-1996). Those who earn an A or A-plus grade average in high school have 4 and 6-year completion rates of 58.2% and 77.5%, respectively, compared to rates of only 8% (4-year) and 20% (6-year) for students who earn C averages (Astin & Oseguera).

Many first and second-generation Hispanic students who drop out of college seem to lack the academic foundation needed to succeed due to unfair access to resources in middle and high school (Ballesteros, 1986). Teachers and counselors often encourage minority children to choose a non-college preparatory program because they feel that the minority child is not suited to, or cannot make a contribution in, a college preparatory program. These perceptions from teachers and counselors have contributed to the under-representation of Hispanics in college-bound curricula (Ballesteros). In addition, Angela Valenzuela, who spent some years visiting classrooms in high schools with large populations of Hispanic students, found that they are also subject to all kinds of mishandling that result from language and cultural issues. What she learned firsthand from her study was that language and culture were viewed as obstacles, barriers, and detriments to academic achievement (Valenzuela, 2000). However, this was not the experience of the four successful student participants in the Hassinger and Plourde (2005) study. The high school students in their study knew that the expectations were high because their teachers believed in them. The teachers created a positive relationship with the students and always provided encouragement and positive feedback.

Financial Resources

Access to financial resources has been extensively cited in the literature as a determining factor influencing college persistence and graduation of Hispanics (Hernández & Lòpez, 2004; Nora, 1990; Padilla, Treviño, González & Treviño, 1997). Muñoz (1986) found that limited access to financial resources constituted the primary source of stress for Hispanic college students. His conclusion resulted from the fact that more Hispanic students come from a lower socioeconomic level than White students, and, therefore, receive less help from parents. Fields (1988) found that Hispanic students' low attainment rate was associated with the need and stress to support themselves or their families. Financial reasons were also behind the fact that most Hispanic students attend community colleges and enroll part-time (Fry, 2003).

With an increase of almost 50% in tuition in recent years at public colleges and universities, and approximate 22% at community colleges (Santiago & Brown, 2004), many Hispanic students are forced to take on higher debts, work outside of school, and rely more on increasingly undependable sources of institutional aid. First generation college students are particularly vulnerable to this financial pressure. Parents may not know how the financial aid system works. Hearing these reports on the increased cost of education reinforces their impression that a college education is not for their children. Students, unable to cope with this negative parental influence, in many instances decide to withdraw. Due perhaps to this insufficient knowledge of the financial resources available, Hispanic students received the lowest average of financial aid (federal and non-federal) of any major racial/ethnic group in 2003 (Santiago & Brown).

On the other hand, research shows that Hispanic college students who receive higher levels of non-campus and campus-based financial aid awards in the form of grants (versus loans and work-study) were enrolled during more semesters and earned more semester hours than those receiving lower levels of assistance. They also received some form of credential (Fields, 1988; Nora, 1990; Rendón & Nora, 1989). Nora (1990) reported that non-campus and campus-based financial aid awards were more strongly related to Hispanic students' retention than students' high-school grades or their college cumulative grade point average.

Participants in a study by Padilla et al. (1997) took advantage of resources by preparing early for the financial aid process, networking with people who understand the financial aid system, and, performing well in their academic work in order to be eligible for scholarship.

English Language Proficiency

Although the research is limited on immigrant college students, the literature suggests that scores on standardized tests of English proficiency do not correlate with college GPA and, therefore, are unsatisfactory criteria for predicting academic achievement in college (Bosher & Rowekamp, 1998; Crisóstomo & Dee, 2001). Language acquisition variables such as length of residence and high school type (with bilingual or non-bilingual instruction) appear to influence academic success more than socio-economic status and standardized entrance examination scores. For example, Crisóstomo and Dee investigated a large sample of 1,854 students whose native language

was not English and found that immigrant students who lived in the United States for 10 years or longer and did not attend bilingual programs were found to have lower GPAs than students who emigrated more recently and attended bilingual schooling. They suggested that "emigrating to the United States may have interrupted students' native language acquisition, which in turn inhibits second language acquisition and constrains academic achievement" (p.11). Their findings coincide with Collier's (1989) extensive research on second language acquisition and academic success in which the highest scores on academic achievement were obtained by students whose primary language development was not interrupted while acquiring the second language.

Speaking a language other than English at home while growing up may also impact persistence of first generation college students. Lohfink and Paulsen (2005) found that first generation students whose primary language spoken at home when growing up was not English were 14% more likely to persist than those who grew up in homes where English was the primary language spoken.

The relevance of these findings in the literature dictated the need for the present study to include survey questions related to immigration status, years in the country, and type of schooling, in order to determine the impact of proficiency in the English language on the participants' success.

According to the personal factors examined in the literature, resilient successful students were impacted by their personal desire to succeed, high self-esteem, high grades, number of Advanced Placement courses taken in high school, access to financial aid, and fluency and understanding of the English language. Whether or not these factors

correspond with those present in the sample for this study was the purpose of this study and its results and conclusions are included in chapters 4 and 5. Added influence should also be determined for the following external factors considered from the literature.

External Factors

The external factors impacting the successful Hispanic students in this study were examined and included under the family and institutional categories. Under the family category the following sub-factors were considered: socioeconomics, educational background, and expectations. The institutional category included the student's involvement in campus life, student's use of campus resources, and student's perception of campus climate. The literature examined on each of these factors follows.

Family

The family socioeconomics, educational background, and expectations about their children's education have repeatedly been identified in the general literature as factors intervening in the student's academic success (Chrispeels & Rivero, 2001; Esprivalo & Scott, 2003; McCloyd, 1990; Nuñez & Cuccaro-Alamin, 1998). In the case of Hispanic parents, immigration status has also been considered influential. Because of the diversity in socioeconomics, educational levels, and immigration status among Hispanics, and the traditional deficit-oriented research, literature appears very limited on how these factors have impacted resilient successful Hispanic students in college; therefore, I referred to the literature on these topics as it impacted the general student population and added available references specifically related to the impact of these family characteristics on successful Hispanic students.

Poverty, low levels of education, expectations, and immigrant status strongly influence the nature and levels of parental support a student may receive. Parents who are preoccupied with hardships in their daily lives may find it difficult to verbalize high expectations for their child's education and therefore may be unable to provide the necessary support. In many instances ongoing poverty leads to a condition of emotional depression that is not conducive to parental support. Therefore, these parents are less likely to interact with their children in a sensitive and positive way (McCloyd, 1990).

Socioeconomic condition of the family is most often related to parental educational level. Parents with low income generally have less education, which makes them less capable of providing the emotional, social, and economic support the college entrance student needs. On the other hand, parents with some college or college degrees are more able to assist their children with navigating the college experience (Esprivalo & Scott, 2003). They already know basic information such as how to register for and select appropriate classes, how to avoid poor instructors, and how to select a good mix and load of semester coursework. They provide what Tinto (1993) referred to as "anticipatory socialization" (p. 97), meaning that parents who have attended college can help their student become oriented to college and benefit from their parents' experiences. This is why for Nuñez and Cuccaro-Alamin (1998) parents' educational level constitutes one of the most important predictors of postsecondary persistence. Supporting their conclusion are the findings from the U.S. Department of Education, National Center for Educational Statistics (2001). The report indicated that, typically, the students whose parents have a bachelors degree, compared to first-generation college students and minority students, have higher SAT and ACT scores, take more rigorous high school coursework, have a

higher grade point average, are White, enjoy a higher family income, take less remedial coursework their first year in postsecondary education, are more likely to be continuously enrolled while working towards a bachelors degree, and are less involved in part time or full time work outside of school (NCES, 2001). In addition to providing the emotional and social support in navigating the system and learning the culture of college, the educated parents most likely have the economic means to contribute to their children's higher education (Nuñez & Cuccaro-Alamin).

In the case of Hispanic parents and their support of their children's education, the existing research makes a distinction based on parents' immigration status. Looking at first generation immigrant parents, McCaslin and Murdock (1991) suggested that, due to the barriers in language, lack of education, and low socioeconomic status, many parents were unable to provide the support their children needed. In addition, parents whose first language was not English had greater difficulty understanding the system and therefore were less able to understand the demands a college education put on their children.

Little research exists on the different aspirations and outcomes of college students who are Hispanic immigrants vs. native-born Hispanic-Americans. It has been determined, however, that either group is less likely to drop out of school when their parents express ongoing high expectations for education (Eksrom, ..aertz, & Rock, 1986). Sanchez and Cardoza (1995) investigated the educational aspirations of Hispanic parents and found that 93% of the Mexican American parents surveyed wanted their children to attend college, a percentage that was equal to the proportion of Anglo parents who desired the same for their children. In a more recent survey conducted by Public Agenda, a non-profit public-opinion research organization, 65% of Hispanic parents,

compared with 47% of Black parents and 33% of White parents, indicated that a college education is the single most important factor to an individual's success (Public Agenda, 2000). In their study of children from migrant families who successfully completed their education, Salermo and Fink (1992) found that the successful students had at least one parent who provided verbal support. These parents encouraged their children to stay in school so the children could have a better life. McMillan and Reed (1994), however, found that the support may also come from other family members, such as aunts, uncles, siblings, or grandparents. In their study on resilient successful college students, they found these children had the opportunity to establish a very close bond with a family member other than a parent who was able to give them the needed attention and support.

Institutional

Institutional factors are also included within the category of external protective factors impacting success of at risk students. The literature examined on these factors positively impacting success of Hispanics in college included the student's use of campus support services, student's involvement in campus life, and student's perception of the campus diversity climate. Using a theoretical framework that contrasts with Tinto's (1993) traditional focus on the students lack of integration to college life as a major cause for departure, Padilla et al. (1997) took a more positive outlook. They stated that resilient and successful minority students develop what they called "heuristic knowledge," which they define as "the practical knowledge that is necessary to function competently on campus" (p.126). It is through this knowledge that students take advantage of the existing external protective factors in the institutional environment. For example, they adequately

use campus support services (e.g., seeking advising services on the profitability of their

chosen majors or careers); they become involved in campus life and activities (e.g.,

joining or creating clubs related to the students' ethnic backgrounds); and they assess the

campus diversity climate and act accordingly (e.g., acknowledging the importance of

minority support and seeking out the ethnic presence on campus). Research on the

effectiveness of students' adequate use or assessment of these external resources is

abundant (Dale & Zych, 1996; Sydow & Sandel, 1998; Wilson, Mason, & Ewing, 1997).

Student Use of Campus Support Services. An array of support services is

available to university students: personal and career counseling, tutoring, academic

advising, cultural enrichment programs, and mentoring are examples of some of these

services.

A number of studies have examined the effectiveness of students using their

"heuristic knowledge" in taking advantages of these services. Effective use of support

services and its relationship with retention was documented by Dale and Zych (1996),

who found that students who participated in HORIZONS, which was a semester long

orientation course for low-income, first-generation students, showed higher retention

rates than an equal number of students who qualified for the program but chose not to

participate. The same results were obtained by Wilson et al. (1997), who followed

students who received counseling services. Those who received counseling had a

retention advantage over those who did not. Furthermore, in a survey of 5,600 students

from 30 institutions in the United States, Sydow and Sandel (1998) found that students

who participated in Student Support Services (SSS) programs had higher retention rates

than a matched sample of students who did not take advantages of those services.

Student Involvement in Campus Life. The importance of participating in campus activities is recognized in Tinto's Model of Institutional Departure (1975), when defining successful college students as those who are socially integrated into the campus life. However, for minority students, this integration most often occurs in smaller units or enclaves. Ethnic clubs, groups, and organizations should also be considered social enclaves (Murguia, Padilla, & Pavel, 1991). Murguia et al. suggested that this affiliation with ethnic others provides security and comfort that ultimately translated to higher achievement. This was also the experience of the successful participants in Padilla et al. (1997) who established or joined ethnic organizations to create a supportive "family" on campus.

Student Perceptions of Campus Diversity Climate. Tracey and Sedlacek (1984) confirmed the findings in Fleming (1984) with regard to the student's perception of a discriminatory racial and diversity campus climate harming the cognitive and affective development of minority students. Factors such as the perception of racism and the ability to cope with it play a more critical role in the academic performance and persistence of minorities in college than such factors as academic ability and study habits. However, in their 1996 study on a sample of 831 students from different ethnic groups, Nora and Cabrera concluded that perceptions of prejudice and discrimination did not have the overwhelming effect they anticipated on the college persistence process among the minority students. They maintained that perhaps minorities have become more accustomed to discriminatory acts on campuses and, subsequently, they have become

more hardened to pressures that would otherwise push students away from persisting in college. This conclusion clearly exemplifies the ability of resilient minority students in overcoming the difficulties of racial barriers.

From the literature examined on external factors impacting successful Hispanic college students, one must conclude that family supports (parents or extended members) and involvement have a positive impact in their successful college experience. The support may or may not be related to the parental educational background, however, in order to be involved, the parent or family member must have knowledge of the "culture of college."

As far as the institutional factors, the literature shows that those students who take advantage of the support services, get involved in campus life, and have a positive perception of the racial institutional environment are more prone to succeed.

Summary of the Literature Review

In the literature examined, resilient successful students are impacted by the following personal and external factors: personal desire to succeed, high self-esteem, high grades, number of advanced placement courses taken in high school, access to financial aid, fluency in the English language, family socioeconomics, educational background and expectations, students' involvement in campus life, students' use of campus resources, and students' perception of campus climate. In addition, I found no specific empirical study which examined all these factors in one single study. Therefore, it was important to examine all these factors in one study with successful

Hispanic college students in Florida and determine to which, if any, they attributed their success.

Theoretical Framework

From the literature examined on the factors present in successful Hispanic students, two major themes emerged. The first is from the Hispanic academic advancement theory developed by Jodry et al. (2005), which emphasized the assets and values influencing the achievement of academically able Hispanic students. This theory contradicted the traditional deficit model that has permeated the educational research on Hispanic and other minority students for decades. The deficit model emphasized the view that ethnic, racial, and linguistic minority students were at best culturally disadvantaged and in need of fixing, or, at worse, culturally or genetically inferior, and consequently beyond help (Caplan & Nelson, 1973; Heller, 1966; Lewis, 1959; Padilla et al.,1997). The second theme relates to the resiliency theory (Garmezy, 1991; Masten, 1994; Werner & Smith, 1992; Zimmerman & Arunkumar, 1994), which provides a framework for understanding those Hispanic students who may owe their success to personal or external protective factors. Models of resiliency refer to the protective factors model. The protective factors model includes personal resources, such as self-esteem and motivation (McMillan & Reed, 1994), and external resources, such as mentors, school counselors, and institutional/community resources (Chavkin & Gonzalez, 2000). Only a small number of recently conducted studies using either the Hispanic asset-based or resiliency framework were found in the literature. Most were qualitative studies involving very small samples. Using a qualitative ethnographic methodology, Hassinger and Plourde

(2005) observed and interviewed four highly successful Hispanic students from the Rock School District in North Central Washington state to explore and examine personal characteristics of these high achieving Hispanic students. They also explored external factors such as support systems that increased chances of student success. The interviews were coded using the Bogden and Biklen (1992) coding approach to determine the common themes and attributes within support systems and personal characteristics and traits of these resilient at-risk Hispanic youth. The following characteristics emerged in the study: (a) supportive relationships- all of the participants in this study had strong, caring relationships with more than one adult in their lives who was willing to help them on their struggles; (b) student characteristics- the major attributes of the students in the study included high self esteem, internal locus of control, and a positive disposition to do their job well.

Hassinger and Plourde provided an adequate framework for the present research; however, in the present study the researcher extended the analysis to other personal and external factors contributing to the success of high achieving Hispanic students. In addition, using a mixed quantitative/qualitative methodology, the present study also included a much larger sample of successful Hispanic students at a college level. It also focused in the state of Florida, where little research has been done on the subject.

Clark, Brooks, Lee, and Pasquarella (2006) recently surveyed 43 scholarship pre-service education students to determine their perceptions of factors that contributed to their success in college and/or graduate school. The quantitative data indicated that a strong sense of perseverance and determination, a belief in one's abilities, influence of

family members, scholarships and fellowships, spirituality, and hope ranked highest among a number of factors rated. The qualitative component added insight and detail about the significance of those factors on the students' successes.

Another qualitative study also added insight on the subject. In 2004, Zurita examined and compared the experiences of 10 Hispanic students from the University Scholars Programs at a large midwestern university. Five of the students persisted through graduation and the other five dropped out. There were some similarities and differences between the two groups. Among the similarities, both groups described similar home environments, a lack of social integration, and feeling of academic un-preparedness.

The differences among the groups were academic difficulties, home-to-school transition, high school segregation, anticipatory socialization, first contact with the university, and education and career goals. Some of these factors, such as academic preparation and family (home), were also examined in the present study; however, several others were added to make a more comprehensive analysis. In addition, the present study contrasted with Zurita's (2004) by using a larger sample of students from different Hispanic backgrounds.

Limitations of sample size and ethnicity of the participants were also found in the qualitative study conducted by Cabrera and Padilla (2004). The researchers used in-depth interviews to describe the resilience of two successful Stanford University Mexican American students (a man and a woman) who faced extraordinary challenges in their school years from kindergarten to graduation from Stanford. Although they recognized that they could not generalize from their results from two cases to all Latino students, the

results from the study did enhance the researchers' belief that Latino students can be successful in college. Although both respondents reported that they owed their academic success to the support given by their mothers and their personal motivation to succeed in school, the researchers also attributed their success to their ability to learn what they referred to as "the culture of college." This is the culture bound knowledge that is necessary to succeed in higher education (Arellano & Padilla, 1996). It is only when this knowledge is provided to the students that they are able to succeed; hence, providing this knowledge becomes a tremendous responsibility for institutions of higher education.

In summary, the studies examined provided a sound knowledge base and insights on resilient and successful Hispanic students. However, there are limitations that the present study intended to address. Such limitations were the sample size, the number of factors examined, the Hispanic population selected that does not represent the diversity of the group, and the locations of the studies, mainly concentrated in the middle and western regions of the nation, which provided a very different environment than the southeastern region, and, more specifically, the state of Florida. the present study also employs the asset-based and resiliency theories as a framework to examine success achieved by Hispanic college students.

Chapter 3 provides a description of the design, procedures, data collection methodologies and analyses used to answer the three research questions for the study.

CHAPTER 3

Study Design, Methods and Procedures

The purpose of this chapter is to discuss the design of the study and the methodology used to explore the factors associated with the academic success of Hispanic college students at four public higher education institutions in the state of Florida. Included in the chapter are the research questions, the research design and description of the participants in the study, instrumentation, and the data collection procedures and analyses. In addition, ethical issues and the limitations of the study are included.

Research Questions

Resulting from the purpose of the study, the following research questions were addressed:

1. What factors from the literature are consistent with those to which Hispanic college seniors in Florida attributed their success?

2. What are other factors to which Hispanic college seniors in Florida attributed their success?

3. Are the factors identified by the students addressed in practices at the institutions of higher education in Florida? If so, how are they documented?

Design

This study employed a descriptive, non-experimental design, with simultaneous mixed methodology. The primary source of the quantitative data was the 61 forced choice and Likert scale items included in the questionnaire entitled "Factors Associated with successful Hispanic Students in Higher Education" completed by the participants (see Appendix A). The items were related to factors of student academic success most frequently identified in the literature, as well as a few others identified by the participants in a pilot study and experts consulted in the field of multiculturalism. Those items were grouped under 8 subscales and the means, standard deviations, and minimum and maximum values for each item were calculated using the descriptive statistics feature on SPSS. An internal consistency reliability analysis followed to calculate the Cronbach's alpha coefficient (1951) for scores on each subscale. A descriptive analysis containing means and standard deviations of the items included on each of the final four construct was also conducted. The purpose of this analysis was to determine students' perception of those items related to success in the literature. Then a correlational analysis was run to determine the relationship among the four construct and with the dependent variable (GPA).

In addition, 13 demographic categorical variables from the survey not included in the quantitative analysis were utilized to describe the characteristics of the student population. Finally, five open ended questions were designed to corroborate, explain, refine, clarify, and add meaning to the quantitative findings and, therefore, increase the richness of the results.

Participants in the Study

The convenience, non-random sample for the study included a total of 137

students who identified themselves as Hispanic seniors who had obtained a grade point

average of 3.0 or above from the following Florida higher education institutions:

University of North Florida, Jacksonville; University of Florida, Gainesville; University

of Central Florida, Orlando; and Florida International University, Miami. The names of

the participants were obtained through the registrar's office at each of the four institutions

(Appendix B).

Instrumentation

Development of Questionnaire

The instrument used in this study (see Appendix A) was developed for the

purposes of the study with a few items adopted from the Student Adaptation to College

Questionnaire (SACQ, Baker &.Syrk, 1984); the Non-Cognitive Questionnaire Revised

(NCQ-R, Tracey & Sedlacek, 1984); General Campus Climate subscale (GCS, Reid &

Radhakrishnan, 2003); the College Student Inventory (Stratil, 2006), Rosenberg's (1965)

self esteem scale, and the Survey Evaluation of the UNF Baccalaureate Graduates

(University of North Florida, 2003). These items are indicated with different symbols on

Table 1 which includes the numerical order of all the items on the survey.

Table 1 *Numerical Order of Items on the Survey*

Item No. (Q)		Personal Factor	External Factor
Q1	Age		
Q2	Place of birth		
Q3	Time living in U.S.		
Q4	First U.S. school		
Q5	Mother's place of birth		Family (immigration status)
Q6	Father's place of birth		Family (immigration status)
Q7	Grandparent origin		Family immigration status)
Q8	Classification		
Q9	Current cumulative GPA		
Q10	Cultural identity		
Q11	Mother's educational level		Family (education level)
Q12	Father's educational level		Family (education level)
Q13	Family annual income		Family (socioeconomics)
Q14	College prep Math	Academic preparation	
Q14	College prep English	Academic preparation	
Q14	College prep Social Sciences	Academic preparation	
Q14	College prep Natural Sciences	Academic preparation	
Q15a	Math remedial courses	Academic preparation	
Q15b	English remedial courses	English proficiency	
Q15c	Understanding US system	Academic preparation	
Q15d	Could read, write, and speak English well	English proficiency	
Q16	English primary language	English proficiency	
Q16	English secondary language	English proficiency	
Q17	TOEFEL score	English proficiency	
Q18	SAT score	Academic preparation	
Q19	Hrs/week studied in high school	Academic preparation	
Q20a	Desire go to college	Motivation	
Q20b	Enrolled because of parents	Motivation	
Q20c	Wanted to graduate	Motivation	
Q20d	Clear career goals	Motivation	
Q20e	College education worth ◘	Motivation	
Q20f	Excited about learning	Motivation	
Q20g	Parents excited about graduation		Family (expectations)
Q20h	Parental financial support		Family (parent support)
Q20i	Emotional support mother		Family (parent support)
Q20j	Emotional support father		Family (parent support)
Q20k	Academic support father		Family (parent support)
Q20l	Limited study due to family		Family (expectations)
Q20m	Father understanding academics		Family (parent support)
Q20n	Mother understanding academics		Family (parent support)
Q21	Full financial aid		Financial resources
Q22	Partial financial aid	Financial resources	
Q23	Worked more than 30 hrs	Financial resources	
Q24	Scholarships	Financial resources	

Table 1 (Cont.)

Item No. (Q)		Personal Factor	External Factor
Q25	Worked to support family		Family (expectations)
Q26	Worked to contribute to family		Family (expectations)
Q27a	I feel I am a person of worth ^	Self-esteem	
Q27b	I think I am not good at all ^	Self-esteem	
Q27c	Not many things I am ashamed •	Self-esteem	
Q27d	I am not an interesting person •	Self-esteem	
Q28a	Extra curricular Stud Government ⊓		Campus involvement
Q28b	Political activities □		Campus involvement
Q28c	Intramural sports □		Campus involvement
Q28	Intercollegiate athletics ⊓		Campus involvement
Q28	Hispanic organizations □		Campus involvement
Q28f	Community services □		Campus involvement
Q28g	Organizations related to major □		Campus involvement
Q28	Student publications □		Campus involvement
Q28i	Church activities ⊔		Campus involvement
Q28j	Sororities or fraternities □		Campus involvement
Q28	Performing arts □		Campus involvement
Q28i	Other ⊓		Campus involvement
Q29a	Career resources ⊓		Use campus services
Q29b	Counseling Center ⌐		Use campus services
Q29c	Academic Advising ⊏		Use campus services
Q29d	Academic Resource Center □		Use campus services
Q29e	Multicultural Center □		Use campus services
Q29f	Women's Center ⊐		Use campus services
Q29g	Disability Resource Center ⊏		Use campus services
Q30a	University friendly atmosphere *		Campus climate
Q30b	Supportive administration		Campus climate
Q30c	Supportive faculty		Campus climate
Q30d	Fair treatment *		Campus climate
Q30e	Fit in with others ~		Campus climate
Q30d	Fair evaluation academic work *		Campus climate
Q30e	Will still attend this university *		Campus climate
Q31	In your opinion, what three most influential circumstances have impacted your successful college experience? Please explain.		
Q32	What three personal characteristics have impacted your successful college experience? Please explain.		
Q33	Which three have been the most challenging to overcome? Please explain.		
Q34	Could you give credit to the institution you attended for your successful college experience? If so, what did they do that helped you to succeed? Please explain.		
Q35	What additional policy, structure, or program do you think your institution has in place to promote Hispanic success?		

~SACQ (Baker & Syrk, 1984); •NCQ-R (Tracey & Sedlaceck, 1984); ◨ CSI (Stratil, 2006); ^Rosemberg, M.(1965);

*Reid & Radhakrishnan, (2003); ⊏ Survey Evaluation of the UNF Baccalaureate Graduates(University of North Florida, 2003)

The survey contained 13 questions corresponding to the students' demographics, 61 items corresponding to the 12 different variables examined in the study, and 5 open ended qualitative questions. The items were drawn from the review of the literature and grouped into questions related to the five personal and seven external factors most frequently recognized in the literature as being associated with student success (see Figure 1). The purpose was to determine which, if any, of these factors had the strongest impact on the academic success of this particular population of successful Hispanic senior students in Florida.
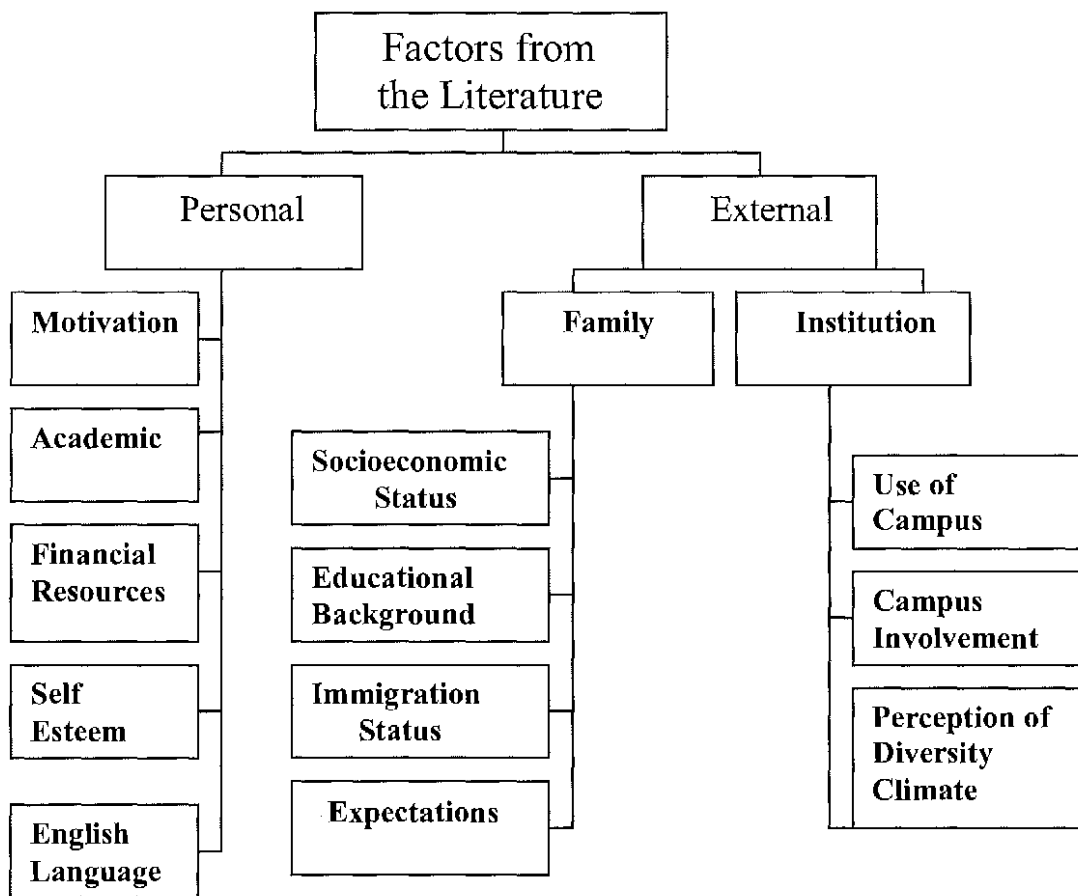
Figure 1. Factors examined from the literature.

To identify specific characteristics of the participants, the demographic items included age, student's place of origin, years living in the United States, first school

attended in the U.S., family annual income, mother's educational level, father's educational level, English proficiency, grade point average, and standardized aptitude test score. The 61 remaining quantitative items in the survey were related to the personal and external factors from the literature. For personal factors, questions related to motivation, self-esteem, academic preparation, and financial resources were included. (The items on English language proficiency were already included in the demographic section.) The items to examine external factors associated with student success were about the family and the institution. Items related to family socioeconomics, immigration status, and educational background were also contained in the demographic section. Other family items examined were parental support and expectations. Questions about the institution included items on student use of campus services, student involvement in campus organizations, and student perception of the campus diversity climate. Table 1 includes the numerical order of items on the survey and the personal or external factor for each item.

The last part of the survey included five open-ended questions. They added meaning to the quantitative data by allowing the students to express their voices and expand their opinions about other circumstances that have also influenced their academic success, but that may or may not have been cited on the quantitative section of the questionnaire. The responses to one question provided information on appropriate programs and structures their institutions already had or should have in place to better serve the Hispanic population and help them succeed.

Pilot Study

The researcher first conducted a pilot study to determine the clarity of the items on the survey, the degree of difficulty experienced by the participants in responding to the items, the length of time required to complete the survey, and the possible inclusion of additional variables that had not been considered. For the pilot study the researcher used a focus group of 10 successful Hispanic seniors from Florida State University (FSU) in Tallahassee, Florida. These students were also members of the Oscar Arias Sanchez Hispanic Honor Society (O.A.S.H.H.S.). The O.A.S.H.H.S. is an organization established at FSU in 1992 to recognize academic excellence among students of Hispanic heritage and to encourage their participation in other campus honor societies and charitable organizations serving Tallahassee and surrounding communities (http://www. fsu.edu/~activity/oscars/). The input from the group was helpful to the researcher in testing the survey and evaluating the items before administering the actual study.

For content evaluation the researcher submitted the instrument to five UNF faculty members and administrators with expertise in the field of multiculturalism. Suggestions from these experts, as well as those from the focus group participants, were incorporated into the final version of the survey.

Data Collection Procedures

Following the approval of the *Request for Review by Institutional Review Board for the Protection of Human Subjects* from the IRB offices at all the four participating institutions (Appendix C), the data for the study were collected from an online survey developed by the researcher. The survey was accessible to the students through

WebSurveyor.com. This organization is an accredited online service recommended by the University of North Florida Instructional Technology Support Services. An informed consent introductory note was inserted on the online instrument providing information to the participants on the participation criteria and nature of the investigation. The involvement of the subjects consisted of responding to the questions contained on the coded instrument.

Subsequently, and to reach a population of Florida Hispanic senior participants that would answer the survey, the researcher requested names and addresses of all senior students from the registrars' office at the following four institutions: University of North Florida, Jacksonville; University of Florida, Gainesville; University of Central Florida, Orlando; and Florida International University, Miami. From the list of seniors obtained from the four institutions, the researcher extracted 1,250 Spanish surnames and sent a letter to these students requesting their participation in the study and providing the website link for accessing the survey. Sample letters to the registrars and the students are shown on Appendix B and Appendix D respectively. One hundred thirty seven students responded to the online survey within a period of two months from the time the first group of letters was sent. As a token of appreciation, participants received a gift card. The entry form requesting information on their street address, city, state, and zip code, was attached to the last part of the survey for students to complete.

Data Analysis

The analysis of the quantitative data included the description of the participants; Cronbach's coefficient alpha to explore internal consistency reliability of the scores on

the survey; a descriptive analysis containing means and standard deviations of each item under the final four constructs resulting from the reliability analysis; a correlational analysis to determine the degree of the association of the four construct with the dependent variable (grade point average); and a multiple regression analysis with the final constructs as predictors to determine the strength of the relationship of these factors with the dependent variable (grade point average).

To account for the missing data from the categorical questions on the demographic section not answered by some participants, I followed recommendations made by George and Mallery (2006) for missing categorical values by creating an additional level called "no response" for those variables and replacing the missing value with the number 999. Most missing data were for demographic items and were not included in the descriptive and multiple regression procedures.

Description of Participants

The descriptive data for the 137 Hispanic college students from the four Florida higher education institutions who participated in the study resulted from the analysis of frequencies and percentages of 13 demographic items included in the first part of the instrument (see Appendix A). These items provided information on participants' age, place of origin, time living in the United States, first school attended in the United States, mother's place of birth, father's place of birth, cultural identity, mother's educational level, father's educational level, family income, student's SAT scores, and student's grade point average.

Determining Internal Consistency Reliability

To measure the internal consistency reliability of the items on the survey, eight subscales were initially created by organizing the items conceptually under the categories found in the literature as impacting successful Hispanic college students. Means, standard deviations, and minimum and maximum values for each item were calculated using the descriptive statistics feature on SPSS, and a reliability analysis was run using the Cronbach's alpha coefficient (1951). Cronbach's alpha is an index of reliability associated with the variation accounted for by the true score of the "underlying construct." Construct is the hypothetical variable that is being measured (Hatcher, 1994). The alpha coefficient ranges in value from 0 to 1 and may be used to describe the reliability of the items; the higher the score, the more reliable is the generated scale (Santos, 1999).

Descriptive Analysis

Following the reliability analysis of all the items on the survey a descriptive analysis was done of the means and standard deviations of the items under the final four constructs resulting from the analysis. The interpretation of those means and standard deviations provided information on the perception of the population of students in the study on items related to success in the literature. A correlational analysis followed to determine the degree of association between the final four constructs scores and the grade point average scores.

Finally, the level of significance of the relationship of the four final constructs with the dependent variable (success as measured by grade point average) was then

determined by running multiple regression analysis using SPSS. The multiple regression

analysis is a multivariable statistical technique used to examine the relationship between

a single dependent variable and a set of independent variables. It is used to explain or

predict the values of a dependent variable on the basis of the values of one or more

independent variables, and to consider the individual contribution of each variable as well

as the direction (positive or negative) of the relationship (Johnson & Christensen, 2004).

Using this procedure I was able to determine what proportion, if any, of the

variance in the dependent variable (GPA) was explained to a statistically significant

degree by each independent construct ($p = .05$). In addition, I was able to establish the

relative predictive importance of each independent variable by examining its beta weights

or standardized regression coefficient.

The qualitative component of the questionnaire was contained in the last five

open-ended questions of the instrument. They were designed to collect information from

participants that would add meaning to the responses of the first and second research

questions related to factors associated with the success of the students in the study. In

addition, these items provided data relative to the third research question by adequately

addressing the institutional practices present at the four institutions examined.

The responses to each of these five open-ended questions were carefully analyzed

to determine the common themes. The common themes were coded, counted, and

summarized on their frequency of appearance. In this type of corroborative procedure

(Johnson & Christensen, 2004) rather than focusing in the "emergent" themes, as is

appropriate in ethnography and phenomenological methods, the thematic analysis

focused on fixed themes or organizational categories (Maxwell, 2005) previously

established in the study, that is the personal and external factors and respective sub-categories: motivation, academic preparation, financial resources; and family and institutional. However, within each thematic area the researcher allowed for emergent sub-categories or elements that characterized the data.

Finally, the results of the quantitative data, already organized by themes (the final constructs included in the regression analysis) were compared with the qualitative results. A determination was then made as to whether the results from both procedures supported or contradicted each other. The themes or factors that emerged from this process responded to the first research question about the factors from the literature associated with the success of this group of students. They also provided the answer for the second research question referring to any new factor not found in the literature and which played a role in these successful Hispanic students from Florida. Finally, the common themes from the fourth and fifth qualitative questions of the survey gave answers to the third research question inquiring

about institutional practices present at the four institutions examined and documented by the participants in the study.

Ethical Issues

An introductory note was inserted in the online instrument explaining to the participants the character of the investigation. The involvement of the participants consisted of responding to the questions contained on the coded instrument.

Due to the character of this study, there were no risks to the participants or any breach of confidentiality. The researcher also completed and submitted to the University of North Florida Institutional Review Board (IRB) the *Request for Review by Institutional*

Review Board for the Protection of Human Subjects (Appendix C). Access to the data collected from the subjects was only granted to the investigator and no individual responses were reported. The online survey was discontinued immediately after the study was completed and approved by the committee.

Limitations of the Study

One limitation of the study was that the data were self- reported by the anonymous participants, therefore, the researcher had no means of verifying the truthfulness of the information provided.

Another limitation was the lack of a comparison group. Because all the students in the study were successful students and had a GPA average of 3.43, there was little variability among the scores. For this reason, the quantitative analysis became more descriptive in nature and has provided some key insights into the resulting factors.

Summary

Hispanics are the fastest growing minority in the United States and in 2050 they will constitute one fourth of the U.S. workforce. In an era of a need for highly educated workers, the under-preparation of this large portion of the workforce and citizenry could jeopardize our global economic competitiveness and domestic social health. Examining factors impacting successful Hispanics in college could generate institutional strategies that would promote educational success of others in this group. This study contributes to that effort by examining the most significant factors impacting successful Hispanic students at four public higher education institutions in the state of

Florida. The study also addressed the limitations of previous research on the subject of Hispanic students' success in college by expanding the number of factors examined, increasing the sample size, and conducting the study at four institutions located in the southeast region of the country. The factors examined were categorized as personal or external. The personal factors examined were motivation, self-esteem, academic preparation, financial resources and English language proficiency. The external factors included family (socioeconomics, immigration status, educational background, and expectations) and institutional factors (student's use of campus resources, student's involvement in campus life, and student's perception of diversity climate).

Using a sample of 137 Hispanic seniors with a grade point average of 3.0 or above, I employed a descriptive, non-experimental design and used a simultaneous mixed-method as a data collection methodology.

The quantitative analyses included a descriptive analysis of the 13 demographic questions and of the 61 quantitative items on the survey grouped in 8 subscales according to the factors of college success identified in the literature; estimates of the internal consistency reliability analysis of each subscale; a descriptive analysis of means and standard deviations of the items included on the final four constructs; a correlational analysis to determine the relationship between the four constructs and the dependent variable (GPA); and a regression analysis using the four constructs as predictors of success.

The qualitative analysis included the responses of the 5 open-ended questions on the survey. Such responses were organized in themes which added meaning to the responses to the three research questions of the study.

Chapter 4 provides a summary of the findings of the analyses employed to determine the factors from the literature or other factors, if any, which the participants perceived associated with their college success.

Chapter 4

Results

The purpose of this study was to determine the factors associated with the success

in college of a selected sample of Hispanic students at the University of North Florida,

Jacksonville; the University of Florida, Gainesville; the University of Central Florida,

Orlando; and Florida International University, Miami. Two quantitative and one

qualitative research questions served as a framework for the data analysis and were used

to organize the findings of the study presented in this chapter.

1. What factors from the literature are consistent with those to which

   Hispanic college students in Florida attributed their success?

2. What are other factors to which Hispanic college seniors in Florida

   attributed their success?

3. Are the factors identified by the students addressed in practices at the

   institutions of higher education in Florida examined? If so, how are

   they documented?

Following the description of the participants in the study, the analyses conducted

providing answers to these research questions are presented. The results from the

quantitative and the qualitative analyses are included to respond to the first question

about the factors from the literature which contributed to the success of Hispanic college

seniors in Florida. The answer to the second question includes those new factors to which

Hispanic seniors in Florida attributed their success. Qualitative data from the fourth and fifth qualitative questions on the survey are presented to respond the third question about the practices at the institutions examined which addressed those factors.

Participants in the Study

The convenience, non-random sample for the study included a total of 137 students who identified themselves as Hispanic seniors with a grade point average of 3.0 or above four Florida higher education institutions.

Table 2 presents descriptive information obtained through the analysis of frequencies and percentages for 13 demographic items included in the first part of the instrument (see Appendix A). These items provided information on participants' age, place of origin, time living in the United States, first school attended in the United States, mother's place of birth, father's place of birth, cultural identity, mother's educational level, father's educational level, family income, student's SAT scores, and student's GPA.

The data collected showed that participants were demographically diverse; slightly more than half of the sample of 137 students were between 18-22 years old, with the majority (85%) being 26 years of age or less. They were also first generation immigrants (46%) and second or third generation Hispanic American (53.6%). The 46% who were first generation immigrants were born in a Latin American country: Cuba, 8%; Colombia, 11.6%; Puerto Rico, 5.8%; Mexico, 2.2%; and 18.8% in other Latin American countries. The remaining 53.6%, were second and third generation Hispanic Americans from parents or grandparents born in Latin America.

Almost half of the participants (48.6%) indicated having lived in the United States all their lives, but of those remaining, 23.5% had been in this country only 10 years or less.

The data on parents' place of birth showed that 25.5% of mothers and 27.5% of fathers were born in Cuba, followed by 17.5% of mothers and 18.1% of fathers born in Colombia. There were also 15.9% of mothers and 10.9% of fathers born in the United States, which indicates that their children (the participants) were third generation Hispanic Americans in the United States.

With respect to educational level, 50% of mothers and 38% of fathers of the participants in the study had attended college. In addition, the household annual income data indicated that two-thirds of the participants reported household incomes of $41,000 and above; and almost one-third (29.3%) reported incomes over $80,000.

The English proficiency data showed that exactly half the sample (n = 69) indicated English as their first language, and the other half (n = 69) stated that English was their second language. With reference to their cultural identity, 41% (n=57) of students defined themselves as Hispanics and 26.3% (n=36) as Hispanic-Americans. The remaining 33% (n=30) identified themselves as Latino (4%) or from their country of origin (Cuban, 2.9%; Colombian, 6.6%) or hyphenated American (Cuban-American, 8%; Colombian-American, 1.5%).

Table 2 *Demographic Characteristics of Participants*

Demographics	Frequency	Percentage
Age (n= 137)		
18-22 years old	76	55.0
23-26 years old	40	29.0
27-30 years old	10	8.0
31 and older	11	8.0
Student place of birth		
United States	74	53.6
Cuba	11	8.0
Puerto Rico	8	5.8
Mexico	3	2.2
Colombia	16	11.6
Other	25	18.8
Years living in the United States		
1-10	32	24.0
11-20	23	17.0
21-30	12	9.0
More than 30	2	1.0
All my life	67	49.0
First school attended in the US		
Non-bilingual private high school	3	2.2
Non-bi lingual public high school	15	10.9
Bilingual private high school	3	2.2
Bilingual public high school	9	6.7
No response	107	78.0
Mother place of birth		
United States	22	16.0
Cuba	35	25.0
Puerto Rico	15	11.0
Mexico	5	4.0
Colombia	24	18.0
Other	36	26.0
Father place of birth		
United States	15	11.0
Cuba	38	28.0
Puerto Rico	16	13.0
Mexico	5	4.0

Table 2 (Cont.) *Demographics*

Demographics	Frequency	Percentage
Colombia	25	18.0
Other	35	26.0
Cultural identity		
Hispanic	57	42.0
Hispanic American	36	26.0
American	3	2.0
Latino	4	3.0
Cuban	4	3.0
Cuban-American	11	8.0
Colombian	9	7.0
Colombian-American	2	1.0
No response	11	8.0
Family annual income		
$10,000 - $20,000	15	11.0
$21,000 - $40,000	26	19.0
$41,000 - $60,000	33	24.0
$61,000 - $ 80,000	20	15.0
Over $80,000	39	28.0
No response	4	3.0
Mother's education level		
Elementary	9	7.0
High school	39	28.0
College	70	51.0
Graduate school	19	14.0
Father's education level		
Elementary	9	6.0
High school	45	33.0
College	53	39.0
Graduate school	30	22.0
English proficiency		
Primary language	69	50%
Secondary language	69	50%

In Table 3 the grade point average indicates that the mean GPA among the
participants was 3.43. For the SAT Reasoning Test the mean score among the 93 students
who reported having taken the test was M=1147.53. Forty four students did not answer
the question.

Table 3

High School GPA and SAT Scores

	Mean	Std. Deviation
Grade Point Average*	3.43	.256
SAT Score**	1147.53	159.610

* N= 137 ** N= 93   missing= 44

Results of the Quantitative Data Analysis

Research question 1: What factors from the literature are consistent with those to which
Hispanic college students in Florida attributed their success?

Research question 2: What are other factors to which Hispanic college seniors in Florida
attributed their success?

This section includes the results from the internal consistency reliability analysis;
the descriptive analysis (means and standard deviations) from the 137 respondents to
each of the items under the final four constructs; the results from the correlations among
the four subscales and of each subscale with the students' grade point average; and the
results from the multiple regression analysis using the four constructs as predictors.

Internal Consistency Reliability Analysis

The following procedure was used to determine the internal consistency of the subscale scores. First, the items from the instrument were grouped under eight subscales and the means, standard deviations, and minimum and maximum values for each item were calculated using the descriptive statistics feature on SPSS. An internal consistency reliability analysis followed to calculate the Cronbach's alpha coefficient (1951) for each subscale. Results of the initial analysis are presented in Table 4.

Table 4 *Initial Grouping of Items from the Survey*

Item	Mean	Standard Deviation	Minimum Value	Maximum Value	Cronbach alpha
Completed College Prep Math	0.46	0.500	0	1	
Completed College Prep English	0.45	0.499	0	1	
Completed College Prep Social Sciences	0.63	0.485	0	1	
Completed College-Prep Natural Sciences	0.63	0.483	0	1	
Enrolled in remedial English	0.81	0.391	0	1	
Enrolled in remedial Math	0.22	0.413	0	1	
Understanding of U.S. system	0.33	0.471	0	1	
Academic Preparation Subscale					0.58
Clear desire to go to college	4.65	0.838	1	5	
Enrolled because of parents	2.94	1.444	1	5	
Always wanted to graduate from college	4.61	0.936	1	5	
Had clear career goals	4.10	1.163	1	5	
College worth time, money and effort	3.90	1.252	1	5	
Get excited about learning new things	4.69	0.627	1	5	
Desire to Succeed Subscale					0.36
Parents excited about college	4.77	0.569	1	5	
Financial support from parents	3.84	1.451	1	5	
Emotional support from mother	4.41	0.928	1	5	
Emotional support from father	4.04	1.311	1	5	
Academic support from father	3.20	1.504	1	5	
Academic support from mother	3.38	1.445	1	5	
Limited studying due family commitment	2.24	1.385	1	5	
Father understanding academic commitments	4.16	1.165	1	5	
Mother understanding academic commitments	4.49	0.779	1	5	
Parental Support Subscale					0.75

Full financial aid	0.43	0.496	0	1	
Partial financial aid	0.59	0.493	0	1	
Worked more than 30 hrs week	0.37	0.484	0	1	
Financial Resources Subscale					-0.97
Self worth on an equal basis with others	0.02	0.147	0	1	
Feel not good at all	0.85	0.362	0	1	
Not many things about myself I am ashamed	0.21	0.410	0	1	
Not an interesting person	0.96	0.189	0	1	
Self Esteem Subscale					0.13
Student Government	0.09	0.284	0	1	
Political activities	0.11	0.313	0	1	
Intramural sports	0.31	0.463	0	1	
Intercollegiate athletics	0.07	0.249	0	1	
Hispanic organizations	0.22	0.415	0	1	
Community services	0.54	0.500	0	1	
Organizations related to major	0.56	0.498	0	1	
Student publications	0.05	0.221	0	1	
Church activities	0.22	0.415	0	1	
Sororities or fraternities	0.13	0.339	0	1	
Performing arts	0.15	0.354	0	1	
Other	0.06	0.235	0	1	
Campus Involvement subscale					0.59
Career Resources	2.03	0.907	0	3	
Counseling Center	2.23	0.949	0	3	
Academic advising	1.09	0.785	0	3	
Academic Resource Center	2.01	1.011	0	3	
Multicultural Center	2.61	0.680	0	3	
Women's Center	2.61	0.842	0	3	
Disability Resource Center	2.88	0.440	0	3	
Use of Campus Services Subscale					0.58
University friendly atmosphere	3.93	1.116	1	5	
Supportive administration	3.43	1.133	1	5	
Supportive faculty	3.85	1.063	1	5	
Treated fairly at the university	4.18	0.925	1	5	
Fit in with others	3.96	1.046	1	5	
Left out of things	3.79	1.053	1	5	
Academic support from mother	3.38	1.445	1	5	
Still attend this university	4.01	1.339	1	5	
Perception Campus Environment Subscale					0.87

After careful examination of each subscale, the following modifications were made.

Academic preparation subscale. The items in these subscales had three different coding scales. For the first four items (college prep courses) 0 (minimum value) = *no,* and 1 (maximum) = *yes;* for items on remedial courses (Math and English) 0 (minimum) = *agree* and 1 (maximum) = *disagree;* and for the item on understanding the U.S. system 0 (minimum) = *disagree,* and 1 (maximum) = *agree.*

The item-total statistics output was examined, and it was noticed that item 15a "remedial Math" exhibited a negative correlation and 15b "remedial English" a 0 correlation with the total subscale score. Item 15c "understanding of the U.S. system" also indicated a weak correlation of .110 with the total. The poor values of these correlations confirmed that those items should not be part of the subscale and had to be removed. However, these are important variables for the population of this study, therefore, they were placed for analysis as demographic items.

Desire to succeed subscale. In the *desire to succeed* subscale the items "clear desire to go to college," " always wanted to graduate," " had clear career goals," and "get excited about learning new things" were coded on a Likert scale of 1 to 5, where 1 (minimum) = *strongly disagree, 2 = disagree, 3 = not sure, 4 = agree,* and 5 = *strongly agree.* However, the answers to items "enrolled because of parents" and "college worth time, money and effort" had a different impact on success, therefore they were coded differently, with a minimum value of 1 = *strongly agree, 2 = agree, 3 = not sure, 4 = disagree,* and 5 = *strongly disagree.* After obtaining an unacceptable alpha of .36 from the reliability analysis, item-total correlations were examined. The analysis indicated that "enrolled because of parents," "college worth time, money

and effort," and "get excited about learning new things" exhibited 0 correlations with the total subscale. The alpha increased considerably when these items were removed.

Parental support subscale. The items included under the *parental support subscale,* were rated on a Likert scale according to the following values: *strongly agree* = 5, *agree* = 4, *not sure* = 3, *disagree* = 2, and *strongly disagree* = 1. When examining relationships of individual variables with the total items in the subscale, it was noticed that item 20m, "limiting studying due to family commitment," exhibited a negative and weak correlation of -.17 with the total subscale. This negative correlation indicated that for this sample, students who responded high on the item "limited studying due to family commitment" responded low on the subscale. Therefore, the limited study item was not measuring the same construct as the subscale, and, consequently, it was removed.

Financial resources subscale. The coding for items 21 (full financial aid) and 22 (partial financial aid) had the value of 1 = *agree*, and 0 = *disagree*. However, item 23 had a reversed coding of 0 = *agree,* and 1= *disagree*. The results of the internal consistency reliability analysis of the scores for this subscale indicated three weak individual items with very low means, little variability, and an unacceptable negative alpha of -0.97. The item-total statistics for the three items exhibited negative correlations with the subscale score, indicating the three items did not hold together as a subscale. Consequently, the entire subscale was discarded.

Self esteem subscale. The four items in this scale were coded as follows: 27a "self worth on an equal basis with others" *agree=*1, *disagree=*0; 27 b "feel not good at all" *agree* = 0, *disagree* = 1; 27c "not many things about myself I am ashamed" *agree* = 0, *disagree* = 1; 27d "not an interesting person" *agree* = 0, *disagree* = 1. The reliability

analysis of the subscale scores exhibited an extremely low and unacceptable alpha value of .013, with very weak items with low or negative individual-total correlations. Perhaps because of the wording of the items and the disparity in the coding, the four items did not hold together and may have been difficult for respondents to interpret. As a result, this subscale was also eliminated.

Campus involvement subscale. This subscale initially consisted of nine extracurricular activities in which students could be involved. The coding of the items was *yes*=1 and *no*=0. In the initial reliability analysis items 28d "intercollegiate athletics," 28i "church activities," and 28k "performing arts" showed very weak correlations of .12, .12, and .15 respectively with the total subscale score. These three items were removed and, as a consequence, the alpha value increased from .59 to .634. However, even after removal of these items the inter-covariance matrix exhibited 0 in almost all the items, indicating no shared variability among the items. In addition, it was noticed that the majority of the items, with the exception of 28 f "community services" and 28g "organizations related to major," had very low means, an indication that the average of the students selected *no* as an answer. As a result of all these observations, it was concluded that the items in the subscale did not hold together; therefore, the entire subscale was removed.

Use of campus services subscale. Items 29a thru 29g in the survey referred to the resources provided on campus and were all included as a subscale with the following coding: *frequently* = 3, *occasionally* = 2, *seldom* = 1, and *never* = 0. Observing the data, responses to items 29f "Women's Center" and 29g "Disability Resource Center" indicated almost zero participation; therefore these two items were not included in the

initial reliability analysis. The initial analysis with the five items remaining exhibited a very poor alpha of .07, and the item-scale statistics indicated a very weak or no correlation of the items with the total subscale. Due to these results, the subscale was also discarded.

Perception of campus environment subscale. The items under this subscale covered items 30a thru 30h on the survey and were rated on a Likert scale from 5 to 1 as follows: *strongly agree* = 5, *agree* = 4, *not sure* = 3, *disagree* = 2, and *strongly disagree* = 1. From the initial reliability analysis, the subscale scores exhibited a strong α = .87, and the item-total statistics showed all the items holding together with individual strong correlations with the total subscale score. This subscale was kept intact.

Table 5 reports the new subscales and component items for the revised instrument.

Table 5 *Component Items on the Revised Instrument*

Item	Mean	Standard Deviation	Cronbach alpha
Completed College Prep Math	0.47	0.501	
Completed College Prep Math	0.45	0.499	
Completed college prep social sciences	0.62	0.487	
Completed college-prep natural sciences	0.64	0.483	
College Preparation Subscale	0.55	0.492	0.81
Clear desire to go to college	4.65	0.838	
Always wanted to graduate from college	4.61	0.936	
Had clear career goals	4.10	1.163	
Desire to Succeed subscale	4.45	0.980	0.68
Parents excited about college	4.79	0.569	
Financial support from parents	3.85	1.451	
Emotional support from mother	4.41	0.928	
Emotional support from father	4.06	1.311	
Academic support from father	3.21	1.504	
Academic support from mother	3.39	1.445	
Father understanding academic commitments	4.16	1.165	
Mother understanding academic commitments	4.49	0.779	
Parental Support Subscale	4.04	1.210	0.83

University friendly atmosphere	3.93	1.116	
Supportive administration	3.43	1.133	
Supportive faculty	3.85	1.063	
Treated fairly at the university	4.18	0.925	
Fit in with others	3.96	1.046	
Left out of things	3.79	1.053	
Academic work evaluated fairly	4.15	1.026	
Still attend this university	4.01	1.339	
Perception Campus Environment Subscale	3.91	1.090	0.87

Descriptive Data for the Final Four Constructs

The *Desire to Succeed* subscale had a value of (M=4.45, SD = .98). This result

suggested that the average responses to these items from the participants fell between

agree and *strongly agree* anchors of the scale, indicating that the students had a strong

desire to succeed in college. This desire is expressed by their determination to go to

college, graduate, and maintain their clear career goals.

The mean value for the *Parental Support* subscale was 4.04, SD = 1.210, which

was intended to measure the perception of parental emotional and academic support as

well as their parents understanding of student academic commitments. This mean score

indicates that the total responses to the items in this subscale corresponded to a value

between *agree* and *strongly agree* anchors, expressing a high perception of parental

support from the part of students. This construct included six items of which the highest

mean in the scale corresponded to *parents excited about me graduating from college*

(M = 4.79, SD =.569), followed by *mother understanding of academic commitment* (M =

4.49, SD = .779).

The third subscale score was Perception of *Campus Environment* (M = 3.91 SD =

1.090). This total mean score belongs to a value between *not sure* and *agree* anchors,

which indicates that most students perceived a university atmosphere that was supportive,

fair, and friendly from the part of faculty and administration, and an environment in which they fit and that was conducive to their success. The scale included eight items, of which perceiving to be *treated fairly at their university* (M =4.18, SD= .925) had the highest mean value.

In the *Academic Preparation* construct students were asked to indicate whether or not they took college prep courses in math, English, social sciences, and natural sciences in high school. The intent of this item was to measure the number of students in the sample with strong academic preparation to succeed in college. The mean score for the subscale totaled .55 (SD=.3492), an indication that more than half of the students in the study took college preparation courses as follows: 55 participants completed a college preparatory level English course, and 53 finished a college preparatory level math course, followed by 38 with a college preparatory level social sciences course, and 36 with a college preparatory level natural sciences course.

Correlational analysis

To determine the degree of association between the subscales scores and the GPA scores, Pearson 2- tailed correlations were conducted in SPSS. Table 6 reports the correlation matrix showing the results of the analysis.

Table 6   *Correlation Matrix*

Variables	1	2	3	4	5
1. GPA	1	0.047	0.003	-0.005	0.048
2 College Preparation		1	-0.073	-0.071	-0.139
3. Motivation			1	.251**	-0.08
4. Parental Support				1	.241**
5. Perception Campus Environment					1

** Correlation is significant at the 0.01 level (2-tailed).

As indicated in the correlation matrix, no meaningful correlation existed between the subscales scores and G.P.A.; however, statistically significant correlations ($p < 0.01$) were noted between motivation and parental support subscales and between the parental support and perception of campus environment subscales.

Multiple regression analysis

Using the four subscales as predictors of success, a multiple regression analysis was conducted to determine which of these constructs, if any, had a significant influence on the success of these students. After completing the analysis, the results (Table 7) indicated a multiple correlation ($R = .112$) between the four predictors and the dependent variable in the regression equation. In addition, the R^2 value indicated that only about

1% of the variance was explained by the four predictors. Table 8 displays the results of the analysis with an F= .407 and indicating a non-significant strength (p= .803) in the overall relationship between the 4 predictors and the student GPA. Table 9, showing regression coefficients indicated the β for the four predictors have near-zero values. In summary, results showed a very poor regression model.

Table 7   *Regression Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.112(a)	.013	-.018	.26092

a Predictors: (Constant), perception campus environment, desire to succeed, college preparation, parental support
b Dependent Variable: GPA

Table 8   *Results of the Analysis of Variance (ANOVA)*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.111	4	.028	.407	.803
	Residual	8.714	128	.068		
	Total	8.825	132			

Table 9 *Regression Coefficients*

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std Error	Beta	t	Sig.
(Constant)	3.272	.204		16.062	.000
College Preparation	.019	.018	.096	1.077	.284
Desire to Succeed	.007	.013	.051	.554	.581
Parental Support	-.001	.004	-.029	-.311	.756
Perception of Campus Environment	.003	.004	.064	.694	.489

Colinearity Diagnosis

To assess for multicolinearity, or the degree of relationships among the 4 constructs

used as predictors and which may affect the interpretation of the results, a colinearity

diagnosis was conducted (see Table 10). The diagnosis indicated condition indices

between 1 and 22. The usual threshold value for a condition index ranges between 15 and

30, combined with variance proportions above .90 (Hair et al.,1998). Although there were

variance proportions above .90 in dimensions 1 and 4, those were not combined with a

condition index exceeding 30. In summary, no appreciable amount of multicolinearity

existed among the constructs examined.

Table 10 *Colinearity Diagnostics*

Model Dimension	Eigen Value	Condition Index	Constant	Desire to Succeed	Parental Support	Perception Campus Environment	College Preparation
1	4.626	1.000	.00	.00	.00	.00	.01
2	.304	3.901	.00	.00	.00	.01	.91
3	.038	11.094	.00	.27	.01	.55	.01
4	.022	14.373	.03	.20	.97	.07	.00
5	.010	22.025	.97	.52	.01	.37	.07

Results of the Qualitative Data Analysis

Research question 1: What factors from the literature are consistent with those to which

successful Hispanic college seniors in Florida attributed their

success?

Research question 2: What are other factors to which successful Hispanic college seniors

in Florida attributed their success?

Research question 3: Are these factors addressed in practices at the institutions

examined? If so, how are they documented?

The first qualitative question (number 31 on the survey), which referred to the

three most influential circumstances that impacted students' successful college

experience, was answered by 101 participants, 73% of the sample. The responses were

first placed under the personal or external major categories of factors. The personal category included responses related to *motivation, financial resources*, and *academic preparation*. The *motivation* sub-category obtained the larger number of responses (52). These responses included statements such as the following : "personal desire to succeed," "determination," "desire to better myself," "long term goals," "example of hard working mother," "low salary without college," "drive to learn," "support for children," "past work experiences," "failure not an option," "discovering career path," and "parental economic hardship."

The *financial resources* sub-category followed with 15 responses, including "access to financial aid," "grants," "scholarships," "financial support from the military," "knowledge of financial aid," "financial security," " jobs opportunities on campus," and "full time summer jobs."

Finally, under the *academic preparation* sub-category 12 responses were collected which related to answers such as "college-prep courses taken in high school," "strong educational background," "study hard in high school," "participation in numerous science fairs," "academic program in previous college," "academic preparation," "participation in the International Baccalaureate Program," "awareness of difficulty of college material," and "good study habits."

Under the external factors category influencing their success, students included responses related to the *family*, the *institution* attended, and *friends*. *Family* was referred to by 54 students in statements such as the following: "family support," "parental support," "parental encouragement for knowledge," "family values," "high family

expectations," "strong discipline from parent," "example from family members," and "being away from family."

The *institutional* factors included 34 responses which referred to "help of professors," "interesting courses," "good advisors," "good mentors," "honors program," "Pathway to Success Program," "technology," "study abroad program," and "mentorship."

Other *institutional* factors related to the campus life and environment with statement such as "good college environment," "campus diversity," "living on campus," "campus involvement." In addition, 26 students mentioned "friends" as being a good influence in them succeeding.

Other circumstances mentioned were "being the first born and having to set standard for siblings," "God's help," "living on my own," "closeness to school." Two students specifically referred to negative circumstances such as: "parental divorce," "poor housing," and "hardships from hurricane Katrina." These circumstances forced them to do well in school and succeed. Table 11 contains frequency and percentage of responses collected in each sub-category.

The second qualitative question (number 32 on the survey) asked students to identify the three personal characteristics that, in their opinion, had impacted their success. Their responses corresponded to the category of personal factors and, therefore,

Table 11 *Responses to Qualitative Question 1*
Most Influential Circumstances Impacting Success

Category	Sub Category	Frequency	Percentage
Personal	Motivation	52	26%
	Personal desire to succeed (15)		
	Determination (12)		
	Desire to better myself (12)		
	Long term goals (5)		
	Low salary without college (1)		
	Example of hard working mother (1)		
	Drive to learn (1)		
	Support for children (1)		
	Past work experiences (1)		
	Failure not an option (1)		
	Discovering career path (1)		
	Parental economic hardship (1)		
	Academic Preparation	10	5%
	College Prep courses in high school (2)		
	Strong educational background (1)		
	Study hard in high school (1)		
	Participation in science fairs (1)		
	Academic program in previous college(1)		
	Academic preparation (1)		
	International Baccalaureate Program (1)		
	Awareness of difficulty of college work (1)		
	Good study habits (1)		
	Financial Resources	15	8%
	Access to financial aid (1)		
	Grants (1)		
	Scholarships (2)		
	Financial support from military (2)		
	Knowledge of financial aid (1)		
	Financial security (6)		
	Job opportunities on campus (1)		
	Full time summer jobs (1)		

Table 11 (Cont

Category	Sub-Category Responses	Frequency	Percentage
External			
	Family	54	27%
	Family support (33)		
	Parental support (14)		
	Parental encouragement for learning (2)		
	Family values (1)		
	High family expectations (1)		
	Strong discipline from parent (1)		
	Example from family members (1)		
	Being away from family (1)		
	Institutional	34	17%
	Help of professors (16)		
	Interesting courses (4)		
	Good advisors (2)		
	Honor program (1)		
	Pathway to Success Program (1)		
	Technology (1)		
	Study Abroad Program (1)		
	Mentorship (3)		
	Campus life and involvement (3)		
	Campus environment (2)		
	Friends	26	13%
	Other	8	4%
	-Being first born and having to set standards for siblings (1)		
	-God's help (1)		
	-Living on my own (2)		
	-Closeness of school (1)		
	-Parental divorce (1)		
	-Poor housing (1)		
	-Hardships from Katrina (1)		

Responses n = 199

the answers collected were classified in three sub-categories: *resiliency, motivation,* and *other.* Under the *resiliency* sub-category, which generated 82 responses, were answers including characteristics such as "determination," "persistence," "discipline," "dedication," "hard work," "organizational skills," "focus," and "being a fighter."

The *motivation* sub-category included 44 responses which referred to "desire to succeed," "desire to learn," "ambition," "goal oriented," and "motivation."

Within the *other* sub-category, which included 31 answers, students mentioned "patience," "honesty," "intelligence," and "friendly/social." Table 12 presents a summary of the responses to this question.

The third qualitative question (number 33 on the survey) asked the participants to list the three most challenging circumstances they had to overcome during their college experience. This question was not specifically designed to respond to any of the three research questions but rather to add information on the challenging issues and circumstances these resilient students had to overcome in order to succeed. This information may be useful in generating recommendations for institutional practices. Many of these issues are common to all college students, but a great number could be considered specific circumstances surrounding this particular minority group. Following the same pattern, the 125 responses were classified into the two major categories of personal and external, with six personal sub-categories: *physical, psychological, cultural, academic, social,* and *financial*; and two external sub-categories which included *family* and *institutional* (see Table 13).

Table 12 *Responses to Qualitative Question 2*
          Personal Characteristics Impacting Success

Category	Sub Category	Responses	Frequency	Percentage
Personal				
	Resiliency		82	52%
		Determination (24)		
		Persistence (19)		
		Discipline (9)		
		Dedication (7)		
		Hard work (12)		
		Organizational skills (7)		
		Focus (3)		
		A fighter (1)		
	Motivation		44	28%
		Desire to succeed (9)		
		Desire to learn (9)		
		Goal oriented (12)		
		Motivation (14)		
	Other		31	20%
		Patience (4)		
		Honesty (6)		
		Intelligence (8)		
		Friendly/social (13)		

Responses n = 157

Table 13 *Responses to Qualitative Question 3: Most Challenges Circumstances*

Category	Sub Category Responses	Frequency	Percentage
Personal			
	Psychological	34	24%
	Isolation (6)		
	Anxiety (4)		
	Depression (5)		
	Pessimism (6)		
	Low self esteem (6)		
	Compulsiveness (2)		
	Shyness (2)		
	Nervousness (3)		
	Cultural	23	16%
	Feeling racially different (3)		
	Cultural shock (3)		
	Dealing with competition (1)		
	Accent (1)		
	Discrimination (4)		
	Language barrier (6)		
	Lack of permanent legal status (2)		
	Different educational system (1)		
	Standardized testing (2)		
	Academic	45	32%
	Time management (31)		
	Lack of interest in required courses (6		
	Difficulty with math, reading, and writing (4)		
	Overwhelmed with academic workload (2)		
	Lack of technological knowledge (2)		
	Physical	4	3%
	Health problems (1)		
	Weigh problems (1)		
	Sexual orientation (1)		
	Poor eating habits (1)		
	Financial	10	7%
	Lack of financial resources (4)		
	Overwhelmed with financial obligations (3)		
	Experiencing financial hardships (3)		

Table 13 (Cont.)

Category	Sub Category Responses	Frequency	Percentage
External			
	Family	6	4%
	Meeting parental expectations (1)		
	Lack of independence from family (1)		
	Homesickness (1)		
	Single parent household (1)		
	Family problems (1)		
	Taking criticism from family (1)		
	Institutional	10	7%
	Standardized testing (2)		
	Poor school counseling (1)		
	Please teacher with subjective opinion (1)		
	Administrative bureaucracy (1)		
	Insults from professors (1)		
	Reporting an unfair professor (1)		
	Being a female in Engineering (1)		
	Dealing with roommates (1)		
	Bad Pre-Med counselors (1)		
	Other		
	Dealing with lazy classmates (1)	10	7%
	Campus distance (1)		
	Legal constraints for internships (1)		
	Relationship got in the way (1)		
	Avoiding partying (3)		
	Accepting things I cannot change (1)		
	Always putting others first (1)		
	Splitting with girl friend (1)		

Responses = 142

From these sub-categories, *psychological* circumstances included the larger number

of responses with 34. Some of the answers focused on "isolation," "anxiety,"

"depression," "pessimism," "low self esteem," "compulsiveness," "shyness," and

"nervousness." The *cultural* issues followed with 23 responses including "feeling racially

different," "experiencing cultural shock," "dealing with competition," "feeling rejected

due to accent," "experiencing discrimination," "experiencing difficulties due to language

barrier," "encountering inability to work due to lack of legal permanent status," "adapting

to the different educational system," and "standardized testing."

Within the *academic* sub-category, "time management," also stated as "difficulty

in balancing work and school," included the higher number of responses with 31. Other

academic issues with 6 responses included "experiencing the lack of interest in required

courses," "difficulty with math, reading, and writing," "feeling overwhelmed with the

academic workload," and "feeling deprived of technological knowledge."

The four *physical* issues mentioned were related to "health," "weight problems,"

"sexual orientation," and "poor eating habits."

Finally, the 10 *financial* circumstances included "experiencing lack of financial

resources," "feeling overwhelm[ed] with financial obligations due to bad spending

habits," and "experiencing financial hardships."

Within the category of external circumstances, *institutional* issues were

mentioned 10 times with responses such as "difficulty with standardized testing,"

"receiving poor school counseling," "confronting teacher with subjective opinion,"

"dealing with the distance to campus," "dealing with the administrative bureaucracy,"

"taking insults from professors," "reporting an unfair professor," "being a female in

engineering," and "bad pre-med counselors." For the family sub-category, the six

responses were "difficulty in meeting parental expectations," "experiencing lack of

independence from family," "dealing with homesickness," "dealing with the pressures of

a single parent household," "family problems," and "taking criticism from family."

There were 10 other circumstances also mentioned by the participants which

included "dealing with lazy classmates," "campus distance," "legal constraints for

internships," "relationship that got in the way," "avoiding partying," "accepting things I

cannot change," "always putting others first," and "splitting with girlfriend."

The last two questions on the qualitative section of the survey were designed

to answer the third research question of the study which asked if the resulting factors

from the study were addressed in practices at the institutions examined and, if so, how

were they documented. The institutional factors that impacted the success of these

students were also addressed in the answers to the first qualitative question under external

factors (see Table 11). Those factors mentioned more frequently by the students were

"the help of professors" and other resources such as "good advisors," "honors program,"

"technology," "study abroad," and "mentorship." In addition, the fourth qualitative

question on the survey asking students if they could give credit to their institution for

their success generated 82 responses. Of these responses 49 participants (60%) said

"yes," 22 (27%) said "no," 8 responded "not really," and 3 either "partially," or "not

sure" (see Table 14). Twenty (41%) of the positive responses attributed credit to "good

faculty." The rest of the responses were very general, referring to: "great resources,"

"good opportunities," or "very challenging." However, 9 students specifically cited the

practices at their institutions. Such practices included resources and programs, such as

"tutoring," "counseling services," "physics department at FIU," "College of Education at FIU," "the McNair Program at UCF," "Pathway to Success Program at UNF," "Hispanic organizations and clubs," and "La Casita at UF" (see Table 14).

.   Table 15 includes the responses to the final qualitative question which asked participants about any additional policy or structure their institution had in place to promote Hispanic student success. Among the 76 responses collected, 36 were specific: 17 (22%) mentioned the existing Hispanic organizations or clubs, and 3 specifically referred to "La Casita," at the University of Florida, which houses more than 40 different Hispanic/Latino organizations on campus. These organizations promote "culture, diversity, and unity throughout the University of Florida campus and Gainesville community"(http://www.dso.ufl.edu/multicultural/lacasita/Hispanic_Latino_Organization s/Hispanic_Latino_Organizations_Home.php). Three students from Florida International University in Miami referred to the university as "very multicultural," and one that "captures the Hispanic environment of the city." Surprisingly, 13 (17%) students responded that they "did not know of any." Finally, 5 responses referred to "scholarship and financial aid for Hispanics and other minorities," 1 said the institution "promotes Hispanic success in the arts and sciences," 2 were specific about the "Ronald E. McNair Program existing at UCF," 1 referred to the "Minority Engineering Office at UCF," 3 to "Hispanic teachers as role models," and one to the "multicultural education at FIU." The remaining 27 responses were very general or negative, including statements such as "great diversity," "lots of organizations," "many," "no limits placed among races," "no discrimination," and "school great in promoting Hispanic success." Some negative responses were: "should have more," "should have something better to get the word out

Table 14 *Responses to Qualitative Questions 4:Institutional Supports Identified by Respondents*

Category	Sub Category	Responses	Institutional Practices
External			
	Institutional		Tutoring services
		Help of professors	Counseling services
		Good advisors	Physics Department at FIU
		Honors program	College of Education at FIU
		Technology	Ronald E. McNair UCF
		Study abroad program	Pathway to Success UNF
		Mentorship	Hispanic organizations and clubs
			La Casita at UF

Responses n=49

Table 15 *Responses to Qualitative Questions 5: Additional Policies or Structures*

	Sub Category	Institutional Practices
	Institutional	Hispanic organizations and Clubs -17
		La Casita (UF)-3
		Very multicultural (FIU)-3
		Captures Hispanic environment of city (FIU)-1
		Scholarships and financial aid for Hispanics and other-5
		Promotes Hispanic success in the arts and sciences-1
		Ronald E. McNair Program (UCF)-2
		Minority Engineering Office (UCF)-1
		Hispanic teachers as role models-3

Responses n=36

about Hispanic activities," "not too many," "should have more Hispanic leaders," "have never been approached by anyone," and "should put more emphasis on Hispanic recruitment at all levels and sectors."

Quantitative and Qualitative Findings

Table 16 includes the findings from the quantitative and qualitative analyses to respond to the three research questions of the study. A description of these findings is included in the chapter summary.

Table 16

Summary of Findings

Research Question	Category	Quantitative Data	Qualitative Data
1.What factors from the literature are consistent with what Hispanic college students in Florida attributed to their success?	Personal	Academic preparation Desire to succeed Parental support Supportive campus environment	Resiliency Determination Desire to succeed
	External		Family Institutional
2.What are other factors Hispanic college seniors in Florida attributed to their success?	Personal		Patience Honesty Intelligence
	External		Friends
3. Are the factors identified by the students addressed in practices at the institutions of higher education in Florida examined? If so, how are they documented?	Personal	Desire to succeed	Helpful professors Good advisors Honors program Study abroad Technology Mentorship Pathway to Success Robert McNair
	External	Friends	Existence of Hispanic clubs and organizations

Summary

Chapter 4 reported on the findings from the quantitative and qualitative analyses designed to respond the three research questions of the study.

Responses to the first research question about the factors from the literature which are consistent with those successful Hispanic college seniors in Florida attributed their success were obtained from the quantitative and qualitative analyses.

The quantitative results from the regression analysis with the four constructs resulting from the internal reliability analysis indicated no statistically significant relationships between predictors and the dependent variable (grade point average). However, the subscale means indicated that, on the average, students expressed an affirmative perception about their *academic preparation*, their *desire to succeed*, their *parental support*, and a *supportive campus environment*. These perceptions were corroborated in their responses to the first qualitative question on most influential circumstances impacting success. *Motivation (self drive to succeed), academic preparation, family,* and *institutional support* appeared with the highest number of responses from students. These results are consistent with what was found in the literature.

The responses to the second research question about other factors to which participants attributed their success came from the qualitative analysis. In their responses participants mentioned other characteristics such as *patience, honesty, intelligence,* and *friendliness* as personal traits that helped them succeed. Patience, honesty, and intelligence were not previously mentioned in the literature examined.

The third research question asked if the factors determined in the study were addressed in practices at the institutions examined, and, if so, how were they documented. Specific practices responding to the students' *desire to succeed* were included in their qualitative responses. Participants mentioned the "help of professors" and other resources such as "good advisors," "honors program," "technology," "study abroad," and "mentorship" as practices contributing to their success. Specific programs, such as Pathway to Success, and the *McNair Program*, were also cited by the students. With reference to *friends* as the last factor most frequently mentioned by the students, the existence of the variety of clubs and organizations, and, more specifically, the Hispanic organizations, were identified as institutional practices which contributed to the success of these participants.

Chapter 5 provides a discussion of the findings, their policy implications, and the recommendations for future research.

Chapter 5

Summary, Conclusions, and Recommendations

The purpose of chapter 5 is tri-fold; first, to present a brief summary of the problem and the research design of the study; second, to discuss the findings of the present study and its contribution to leadership practice; and third, to present the conclusions and recommendations for future practice and research.

Summary

Hispanics are the largest minority group in the United States, and their numbers are growing. This group currently represents 14% of the U.S. population, a figure that is expected to grow to 25% within 20 years (National Research Council, 2006). This population is also very young, with a median age of 27 years old, versus 39 for non-Hispanic Whites (U.S. Bureau of the Census, 2000a). The education of this group is critical to the economic and social future of the United State as it is projected that one out of four persons in the workforce will be a Hispanic in the near future. In an era of a need for highly educated workers, the under-preparation of this large portion of the workforce and citizenry could jeopardize our global economic competitiveness and domestic social health. Examining factors impacting successful Hispanics in college could generate institutional strategies that promote educational success of others in this group. This

study contributes to that effort. In addition, the present study was motivated by an interest in contributing to the limited research on successful Hispanic students and addressing the limitations in sample size, demographics, and location of existing studies. This study has accomplished both purposes: first, by providing results on factors already in the literature that are now also associated with the majority in the sample of 137 successful Hispanic college seniors at the Florida institutions examined; and second, by including a very diverse sample of Hispanic students not frequently included in previous research. In addition, by conducting the research at four higher education institutions in Florida, a new geographical and environmental reality was also introduced.

Three research questions framed the study:

1. What factors from the literature are consistent with those to which successful Hispanic college students in Florida attributed their success?

2. What are other factors to which Hispanic college seniors in Florida attributed their success?

3. Are the factors identified by the students addressed in practices at the institutions of higher education in Florida examined? If so, how are they documented?

The data for the study were collected by means of a survey that was developed specifically for this study (see Appendix A). Items for the survey were drawn from the review of the literature and grouped under the categories of personal and external factors.

These categories were taken from the existing research on resilient students from traditionally "at risk" populations, indicating the presence of personal and external (protective) factors that help them overcome the difficulties and circumvent problems (Garmezy, 1991). The personal factors examined included motivation, self esteem, academic preparation, financial resources, and English language proficiency. The external factors were classified under family and institutional. The family factors considered the socioeconomics, educational background, immigration status, and expectations of the family. The institutional factors included the students' use of campus services, the students' campus involvement, and the students' perception of the campus diversity climate.

The sections to be discussed in this chapter will include (a) relevance of the participants' demographics, (b) the quantitative and qualitative findings in response to the first and second research questions, and (c) the qualitative findings that answered the third research question of the study. Following these three sections will be the contribution of this study to leadership practice and some recommendations for future research.

Relevance of Participants' Demographics

The demographics of the participants in this study reveal characteristics that contrast with descriptions of Hispanic students participating in previous research. The participants in the present study were from diverse Hispanic origin; the majority belonged to middle and upper income households and had at least one college educated parent.

They were first, second, and third generation immigrants or Hispanic Americans with a Hispanic background from a variety of Latin American countries. In addition, many were second and third generation college students. This is a very different population of students than those found in previous research, which included a majority of Hispanic students of Mexican descent. The socioeconomic status of parents of Hispanic students as a group has been traditionally perceived as one from the low socioeconomic spectrum, lacking in formal education and with little knowledge of the English language. Whereas Mexican American parents tend to value and encourage education (Fleming, 1984), such perceptions of Hispanics have interfered with the success of many individuals in this group. In fact, many students often respond to the beliefs that teachers and administrators have about their socioeconomic mobility (Valenzuela, 2000). In addition, McCaslin and Murdock (1991) suggested that, due to these barriers in language, lack of education, and low socioeconomic status, many parents of Hispanic students were unable to provide the support their children needed. To further complicate matters, parents whose first language was not English had greater difficulty understanding the system and therefore were less able to understand the demands a college education put on their children.

The parental educational and socioeconomic data of the students in the present study, however, indicated that the background of the families of participants had a different socioeconomic and educational profile. Fifty percent of mothers and 38% of fathers of participants in the study had a college degree. Whether these parents already had the education at the time of immigration or obtained the degree in the United States

was not determined, however, it is possible they have enjoyed a higher socioeconomic and educational status in their countries, which allowed them to integrate easily and become successful in their new country. In addition, almost 50% of the participants in the study were born in the United States, meaning that these participants are second generation immigrants whose parents may have obtained an education in the United States as well. In any case, the data indicated that the majority of the participants in the current study were second generation college students. This also contradicts what has traditionally been stated in the literature, that ethnic minority students are more likely than other students to be the first in their family to attend college (Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996). In addition, this finding complements the results by Nuñez and Cuccaro-Alamin (1998) in which parents' educational level constituted one of the most important predictors of postsecondary persistence.

With respect to socioeconomic status, the data showed that 65% of the participants declared a family household annual income of $41,000 and above, with 28% declaring $80,000 and above. These numbers indicated that the majority of the participants in the present study belonged to a middle or high socioeconomic status. The correlation of parental socioeconomic and educational background with students' academic success has been frequently established in previous studies (Chrispeels & Rivero, 2001; Esprívalo & Scott, 2003; McCloyd, 1990). The data obtained in the present study suggested that parental socioeconomics and educational background may have played an important role in the success of these students.

In summary, the demographic data analyzed indicated that participants differed from the traditional existing Hispanic populations described in previous literature. They came from different Hispanic origins and were members of families with higher socioeconomic and educational background than participants in much previous research.

Discussion of Findings

This section includes conclusions from the findings and relates the conclusions to previous research. The discussion is organized according to the three research questions and takes into consideration both quantitative and qualitative results. With respect to the qualitative responses, I will comment on those subcategories which represented more than 10% of the responses and those specific responses provided by 3 or more participants.

Research Question 1

The first research question asked the following: *What factors from the literature are consistent with those to which Hispanic college students in Florida attributed their success?*

From the quantitative analysis, none of the four constructs included in the regression analysis resulted in a significant association with grade point average. It may have been because of the lack of variability in the grade point average scores (dependent variable). Because the specified criteria for participants required that they had a grade point average of 3.0 or above, all the scores were between 3.0 and 4.0, with little

room for variability. Allowing a group of participants with lower grade point average would have generated a wider range of scores and might have produced a more significant relationship among the four constructs and the dependent variable.

Despite the shortcoming described above, it is worth noting that the students in the study acknowledged the presence in their successful college experience of the four subscale factors developed from the literature. The mean score for *desire to succeed*, for example, indicated a high positive response. These results were confirmed in the qualitative responses, where students equally expressed their *resilience* and *desire to succeed* in statements referring to "self drive to succeed," "determination," "desire to better myself," and "long term goals" as influential circumstances they perceived impacted their success in college. This desire may be seen as a form of degree-level goal commitment that has been found to have significant relationships to persistence in previous studies (Allen & Nora, 1995; Astin, 1975; Terenzini & Wright, 1987) and is very much a characteristic of resilient students (Hassinger & Plourde, 2005). Although the Hispanic culture is considered to be a collectivistic culture (Markus & Kitayama, 1991), these individual motives to succeed were found in this group of Hispanic students.

The findings of the present study are consistent with a study by Dennis, Phinney, and Pacheco (2005) who found a similar degree of motivation in a group of Hispanic students. The personal desire to attend college based on personal interest, intellectual curiosity, and the desire to attain a rewarding career was found to be predictive of their college adjustment and positive college outcomes. This type of internal motivation is also considered internal locus of control, or the belief that they are in

control of their own destiny, and it is very much a characteristic of resilient students (Hassinger & Plourde, 2005).

Responses to another construct, *academic preparation*, which is listed among the personal factors in the literature, indicated that more than half of the students in the study had taken college preparation courses in high school. This finding was also corroborated in the qualitative analysis, where many students cited "college-prep courses taken in high school" as another influence to their success. Although not all the students indicated completion of college preparatory courses, these results from the group in the present study differed with the common belief that Hispanic, as well as other minorities, have traditionally been underrepresented in Advanced Placement programs (Darling-Hammond, 2007). On the other hand, it is worth mentioning the fact that the other half of resilient participants succeeded even without taking Advanced Placement courses in high school.

The mean score for the construct *parental support* also indicated positive perceptions of this external support. This favorable perception of parental support was also corroborated in the qualitative analysis, where *family* was included in 52 responses. These responses from the Florida students add weight to the existing literature where parental/family support has been associated with student success. Responses referring to family included: "family support," "high family expectations," "family values," and "emotional support from family." Several responses were more specific as to whether the support was from parents, brother, sister, husband, or a member of the extended family. These responses are in agreement with the findings of McMillan and Reed (2004), where

students had the opportunity to establish a very close bond with a family member other than a parent who was able to give them the needed attention and support.

These findings about parental/family support are not surprising since "familism" has been frequently proposed as a core value characterizing Hispanic culture. It included an individual's strong identification with and attachment to the nuclear and extended family along with strong feelings of loyalty, reciprocity, and solidarity among family members (Marin & Marin, 1991).

The fourth and final construct from the descriptive analysis was *supportive campus environment*. The mean for this construct was positive, although not as high as the mean scores for *desire to succeed* and *parental support*. This result also coincides with students' qualitative responses under the institutional circumstances impacting their success. It is also important to notice that *institutional support* was also reconfirmed in the responses to the question on giving credit to their institution for their success. Forty-nine students (60% of the respondents) responded positively. These findings are also corroborated by previous research (Dale & Zych, 1996; Hassinger & Plourde, 2005; Nora, 1990; Santiago & Brown, 2004; Sydow & Sandel, 1998).

Among the institutional resources associated with their success, students most frequently named professors as a supportive institutional resource. Some of the responses included "great motivation from the professors," "professor helped me develop creative thinking," "good support from professors," "I give credit to faculty that helped me achieved my goals successfully," and, "some professors help me a lot with my language barrier." The supportive relationship participants found with their professors also

coincide with determinant protective factors on the success of resilience students found in previous studies (Hassinger & Plourde, 2005).

Research Question 2

The second research question asked about other factors to which successful Hispanic college seniors in Florida attributed their success. In the qualitative analyses, *patience, honesty,* and *intelligence* were new characteristics not previously mentioned in the literature examined. These personal characteristics, which were mentioned by some participants, are very much associated with the strong sense of perseverance and determination to succeed found in resilient students (Clark, Brooks, Lee, & Pasquarella, 2006). Resilient students are honest and knowledgeable of their intelligence and problem solving ability to do their job well (Hassinger & Plourde, 2005).

Research Question 3

The third research question asked whether the resulting factors were addressed in practices at the institutions examined, and if so, how were they documented? From the descriptive analysis, the construct *supportive campus environment* obtained a mean score of 3.91, which represents a value between the *not sure* and *agree* anchors, indicative of a favorable perception of the university environment. The students' responses to the items included in this particular construct reflect a perception of a campus environment that was supportive, fair, and friendly. These perceptions were supported in their responses to

the last two qualitative questions, where institutional support was cited as contributing to the success of many of the students. Not all participants responded the fourth qualitative question: *"Could you give credit to your institution for your success?"* However, over half (45) of the 80 respondents answered positively, indicating that their institution clearly contributed to their desire to succeed. Specific practices mentioned by some of the students included the "help of professors," "interesting courses," and other resources such as "good advisors," good mentors," "honors program," "technology," "study abroad program," "Pathway to Success Program," and "mentorship." Other institutional factors were related to the campus life and environment, with statements such as "good college environment," "campus diversity," "living on campus," and "campus involvement." In reference to more specific policies, structures, or programs which promoted the success of Hispanics, 36 responses included the existence of Hispanic organizations and clubs, scholarships and financial aid for Hispanics and other minorities, the Ronald E. McNair Program at UCF, the Minority Engineering Office at UCF, the multicultural education and environment and at FIU, and the Pathway to Success Program at UNF. In addition, the multiple Hispanic organizations and clubs existing at the four institutions examined provided an affiliation with ethnic others for security and comfort which in the literature has translated to higher achievement (Padilla et al., 1997). The financial aid offered by the institutions also benefited those Hispanic student participants who were knowledgeable of the system and took advantage of those resources to alleviate the college financial burden on themselves or their parents. The use of campus services such

as the mentorship and advising programs, as well as the involvement in other programs provided by the institutions such as honors, study abroad, Pathways to Success, and the Ronald McNair Program, may have provided participants with a smooth, successful transition throughout their college experience. All these resources not only have traditionally been effective in contributing to the retention of Hispanic students (Sydow & Saidel, 1998), but also provide the additional supportive environment that may translate to achievement (Padilla et al., 1997).

Despite these resources provided by the institutions, one could not disregard the fact that there were a great number of participants who did not acknowledge this support; only 45 of the 80 students participating responded positively to the question about whether they could give credit to the institution for their success. There were also 57 students who did not respond to the item in any way. How could institutions be more effective in reaching out to these resilient college students and others not so resilient and help them succeed? The next section will offer some recommendations.

Conclusions and Recommendations

The findings of the current study lead to conclusions, recommendations to be considered, and questions worthy of future research that would help increase the number of successful Hispanic students in college.

The findings from the participant demographics suggested that, contrary to what it has traditionally been considered in the literature on the subject, Hispanic students belong to a very diverse group in terms of country of origin, socioeconomics, and immigration

status. The results from the present study of Florida Hispanic college students also confirmed the presence of personal and external factors already identified in the literature which are associated with resilient Hispanic college student success. In addition to the personal characteristic very much associated with resiliency, such as great determination and *desire to succeed*, students noted *academic preparation* and *familial* and *institutional support* as very much associated with their college success.

Findings of the current study have implications with regard to the demographic variables, such as country of origin, socioeconomics, and immigration status. Because these and other descriptive data were not included in the research questions or factored into the analyses of each research question, further research including these variables in the analyses is recommended in order to more effectively address the issue of Hispanic diversity and its relationship with college success. For example, do Hispanic students from differing countries of origin perceive similar or different factors as contributing to their success? Do Hispanic students who are first generation college students identify similar or different factors as contributing to their success than second or third-generation college students?

In addition, it would be important for future studies to include the participation of a group of non-successful students, or students with a grade point average of less than 3.0. Adding this comparison group would increase the variability of participants' scores and may provide a stronger test of the relationship between the outcomes and predictors of success.

It is also important for faculty and administrators to be aware of the demographic differences and the existing barriers for Hispanic students to successfully persist and graduate. As a component of comprehensive diversity training on the different cultures on campus, information about the history of the different Hispanic countries is recommended. This knowledge will lead to a better understanding of the present circumstances impacting our students. Table 14 presented a list of circumstances participants considered most challenging to their success. This list may serve as a good guide for institutions, and particularly for divisions of student services, to follow when addressing the issue of Hispanic success and the many circumstances that contribute to the process. Special attention should be given to the psychological and cultural circumstances participants reported as barriers they had to overcome. The analysis of these circumstances would be particularly beneficial when developing institutional strategies for reaching out to other Hispanic college students who may not be so resilient and, therefore, more at risk of failure and departure. The recruitment of more Hispanic faculty could be an initial strategy. These faculty are aware of the cultural differences and circumstances Hispanic students have to overcome, and, therefore, are sensitive to the needs of these students. According to the U.S. Department of Education, the percentage of Hispanic faculty members at degree-granting institutions rose from 3% in 1995 to 4% in 2003. However, Hispanic students comprised 8% of all college students in 1995, but increased to 11% by 2003 (U.S. Department of Education, 2005). It is evident that the issue of under-representation of Hispanic faculty must be considered if institutions are serious about addressing Hispanic success.

As the data indicated, the participants in this study were all resilient, successful, first, second, and third generation Hispanic college students, whose great desire to succeed, and other protective personal and external characteristics and circumstances helped them in the challenge. However, additional research in the issue of family influence is recommended. Although the importance of *familismo* is well recognized in ethnic minority research (Keefe, Padilla, & Carlos, 1978; Marin & Marin, 1991; Sabogal, Marin, Otero-Sabogal, Marin, & Perez-Stable, 1987), a better understanding and more scholarly findings are needed on the family-student relationship and the impact of this intricate relationship on the resilient student and the non-resilient student. Because the support of family was evident in the success of the participants in this study, it is also important for institutions to reach out to Hispanic parents and ensure their participation in events such as orientation, parents' day, and family days. To compensate for the language barrier, which may deter the participation of first generation immigrant parents at these events, an extra effort should be made in providing translators to ensure that parents feel welcome and understand the information provided. Past successful programs and services for Hispanics have acknowledged that every student is part of a larger family system and the students' families constitute a crucial component of students' overall college experience (Oliva & Nora 2004).

A good number of participants reported the role of the institution as also contributing to their success; however, a considerable number of participants did not. Among those who did, credit was given mainly to faculty. A few others gave credit to resources such as mentors, advisors, study abroad, honors programs, and scholarships and

financial aid offered. Others referred to specific programs such as the Robert McNair Program, Pathways to Success, and Hispanic clubs and organizations. These findings indicated that there is more institutions can do to reach out effectively to Hispanic students, particularly to those first generation Hispanics who lack the knowledge to successfully navigate the system. The use of more effective information and advertisement mechanisms for developing awareness about the many student services provided is recommended. Creative advertisement from academic resource centers, counseling centers, and career services using popular mediums, such as the Internet Facebook, MySpace and others, would be a step in the right direction. Posting personal e-mail letters and flyers on the Hispanic organizations Web pages encouraging the use of these services is also recommended.

All the above efforts in increasing the outreach and support of the Hispanic student body should be important goals of institutions of higher education. Change is necessary in order to address the needs of this important population of students, a group that will make a difference in the future social, economic, and political make up of this nation.

Appendix A

Factors Associated with Successful Hispanic Students in Higher Education

If your are a **Hispanic senior, with a GPA of 3.0 or above** we invite you to take part in this research study conducted by Ana G. Linares, who is a doctoral candidate at the University of North Florida (UNF). The purpose of this study is to determine the most significant factors associated with successful Hispanic students at four public higher education institutions in the State of Florida. Your participation in this study is completely voluntary and you may choose not to answer any of the questions on the survey. Your responses to the questions are completely anonymous; therefore, no personal identification data is required. Only the investigator and her Dissertation Chair will have access to the information you provide in this survey. Once survey results are analyzed and recorded they will be destroyed. Completion and submission of the surveys shall serve as your consent to participate in this study.
Should you have any questions about this study please feel free to contact Ana Linares at alinares@unf.edu For questions about your rights as a research particpant, please contact Dr. Kathaleen Bloom, Chair of the UNF Intitutional Review Board, at 904-2498.
We sincerely appreciate your participation.

In the following questions, please fill in the blank or check the appropriate response.

---

1) I am

  18-22 years old
  23-26 years old
  27-30 years old
  31 and older

2) I was born in

  United States
  Cuba
  Puerto Rico
  Mexico
  Colombia
  Salvador
  Other (please specify)

  If you selected other, please specify: _____

3) I have lived in the United States

  All My life
  1-10 years
  11-20 years
  21-30 years
  more than 30 years

4) (If you have lived in the United States all your life or came to the U.S. before entering high school skip this question and go to question 5).

4. When I first came to the United States I attended a

     Non-bilingual private high school
     Non-bilingual public high school
     Bilingual private high school
     Bilingual public high school

5) My mother was born in

     United States
     Cuba
     Puerto Rico
     Mexico
     Colombia
     Salvador
     Other (please specify)

    If you selected other, please specify:

6) My father was born in

     United States
     Cuba
     Puerto Rico
     Mexico
     Colombia
     Salvador
     Other (please specify)

    If you selected other, please specify:

7) I have at least one grandparent born in

     Cuba
     Puerto Rico
     Mexico
     Colombia
     Other Latin American country

8) I am a

    _____

9) My current cumulative GPA is

_____

10) I identify myself as

_____ _____

    If you selected other, please specify: _____

11) My mother's highest level of education is

    Elementary
    High school
    College
    Graduate school

12) My father's highest level of education is

    Elementary
    High School
    College
    Graduate School

13) My family approximate household annual income is

    $10,000 - $20,000
    $21,000 - $40,000
    $41,000 -$60,000
    $61,000 - $80,000
    over $80,000

14) Please check all that apply.

When I was in high school I completed college-prep courses in the following areas:

    ☐ Math
    ☐ English
    ☐ Social Sciences
    ☐ Natural Sciences

15) Please select the appropriate responses to the following statements:

Agree   Disagree

a. I enrolled in Math remedial courses on my first year in college.

b. I enrolled in English remedial courses on my first year in college.

c. I had a fair understanding of the post-secondary educational system in the United States when I first enrolled in college.

d. I could read, write, and speak english well when I graduated from high school

16) English is my

☐ Primary language
☐ Second language

17) Score on my TOEFEL exam

_____

18) Score on my SAT

_____

19) Hours a week I studied in high school

_____

20) Please select the appropriate responses to the following statements:

	Strongly agree	Agree	Strongly disagree	Disagree	Not sure
a. I always had a clear desire to go to college					
b. I enrolled in college because my parents wanted me to					
c. I always wanted to graduate from college					
d. I've always had clear career goals					
e. I often wonder if a college education is worth the time, money , and effort I have put into it.					
f. I get excited about learning new things					
g. My parents are very excited about me graduating from college.					
h. I have received financial support from my parents during my college career					
I. I have received emotional support from my mother during my college career					
j. I have received emotional support from my father during my college career.					
k. I have received academic support from my father during my college career.					
l. I have received academic support from my mother during my college career					
m. My study time was frequently limited due to family commitments.					

n. My father has been very
understanding about my
academic commitments

o. My mother has been very
understanding about my
academic commitments

21) I have received full financial aid to cover my college expenses.

    Agree
    Disagree

22) I have received partial financial aid to cover my college expenses

    Agree
    Disagree

23) I have worked more than 30 hours a week during my college career to cover my college expenses.

    Agree
    Disagree

24) I have received scholarships totaling the following amount while in college.

_____

25) I have worked an average of the following hours a week while attending college in order to support my family. (Enter 0 if you did not work, or if you did not work for this purpose).

_____

26) I have worked an average of the following hours a week while attending college to contribute to my family income (enter 0 if you did not work, or if you did not work for this purpose).

_____

27) Please select the appropriate responses to the following statements:

                                        Agree Disagree

a. I feel that I am a person of worth at least on an equal
basis with others.

b. At times I think I am not good at all.

c. There aren't many things about myself of which I'm ashamed.

d. I'm not an interesting person.

28) Please select all of the extra-curricular activities below in which you have participated so far while completing your college degree.

☐ a. Student Government
☐ b. Political activities
☐ c. Intramural sports
☐ d. Intercollegiate athletics
☐ e. Hispanic organizations
☐ f. Community services
☐ g. Organizations related to major
☐ h. Student publications
☐ i. Church activities
☐ j. Sororities or fraternities
☐ k. Performing arts
☐ l. Other

If you selected other, please specify: ___

29) While at the university, how often have you used the services listed below? Please indicate by selecting the most appropriate column.

	Frequently	Occasionally	Seldom	Never
a. Career Resources				
b. Counseling Center				
c. Academic Advising				
d. Academic Resource Center				
e. Multicultural Center				
f. Women's Center				
g. Disability Resource Center				

30) Please select the appropriate response to the following statements:

	Strongly Disagree	Disagree	Agree	Strongly Agree	No opinion
a. I have found the atmosphere at this university to be very friendly					
b. I have found the Administration at this university to be very supportive.					
c. I have found the Faculty at this university to be very supportive.					
d. I have been treated fairly at this university.					
e. I fit in with the other students here.					
f. I feel left out of things here at this university.					
g. My academic work is evaluated fairly.					
h. If I had to do it over again, I would still attend this university.					

31) In your opinion, what three most influential circumstances have impacted your successful college experience? Please explain.

_____

32) What three personal characteristics have impacted your successful college experience? Please explain.

_____

33) Which three have been the most challenging to overcome? Please explain.

34) Could you give credit to the institution you attended for your successful college experience? If so, what did they do that helped you to succeed? Please explain.

35) What additional policy, structure, or program do you think your institution has in place to promote Hipanic success?

GIFT CARD ENTRY FORM

The first 35 people to complete this survey from your university will receive a $5.00 store gift certificate. If you would like to be included in the pool from which we select the 35 gift card recipients, please complete this section and **detach it** at the dotted line above. Your name is not needed, only your address. *Please submit this section separately from your completed survey in order to ensure that your survey responses cannot be linked to your address.*

Street Address

City, State and Zip Code

Thank you for your participation!

Appendix B

Letters to Registrar's Offices Requesting Data

March 1, 2007

Ms. Vicky Buenomo
University of North Florida
Registrar

Dear Ms. Buenomo:

My name is Ana G. Linares, and I am a Doctoral Candidate at the University of North Florida. As part of my dissertation research I am examining the factors associated with successful Hispanic students at four different higher education institutions in Florida. To this effect, I would like to request from the Registrars office at UNF to provide me with an electronic list of names and e-mails of all UNF seniors from which I could pull the sample needed for my study. A copy of the most recent IRB document approving my study is included.

I anticipate my appreciation for your attention to my request.

Sincerely,

Dr. Janice Seabrook   Ana G. Linares
Dissertation Committee Chair   UNF Doctoral Candidate

From: Linares, Ana
Sent: Friday, March 23, 2007 4:11 PM
To: 'sbalogh@ufl.edu'
Subject: Data Request

Dear Ms. Balough:

My name is Ana G. Linares, and I am a Doctoral Candidate at the University of North
Florida.

As part of my dissertation research I am examining the factors associated with successful Hispanic students at four different higher education institutions in Florida. To this effect, I would like to request from the UF Registrar's Office a set of labels in **alphabetical order** and including the following:

Name and local address of all seniors enrolled at the University of Florida this semester.

I will be sending a letter to these UF students asking them to participate in my study by responding to an anonymous, 10 minutes survey, located at the following online address: https://websurveyor.net/wsb.dll/89808/Successfactors.htm .

Please advise of the cost involved in sending these labels first class to my personal address:

7927 Little Fox Lane
Jacksonville, Florida 32256

I anticipate my appreciation for your help and attention to my request.

Sincerely,

Ana G. Linares
Doctoral Candidate
University of North Florida

From: Linares, Ana
Sent: Tuesday, April 17, 2007 11:35 AM
To: 'Dennis Dulniak'
Subject: RE: FW: Data Request

Dear Mr.Dulniak:

My name is Ana G. Linares, and I am a Doctoral Candidate at the University of North Florida.

As part of my dissertation research I am examining the factors associated with successful Hispanic students at four different higher education institutions in Florida. To this effect, I would like to request from the UCF Registrar's Office either one of the following:

a) an electronic list containing names and e-mails of all UCF seniors, or

b) to send the attached e-mail to senior students with Hispanic surnames directing them

to the following link: https://websurveyor.net/wsb.dll/89808/Successfactors.htm If you choose this option, please send me a copy of your e-mail for my records.

A copy of the most recent IRB document approving my study is attached for your records. I saw your IRB officer, Ms. Barbara Ward yesterday and she already has a copy of this IRB document on file.

I anticipate my appreciation for your attention to my request.

Sincerely,

Ana G. Linares
UNF Doctoral Candidate
(904)620-2436

From: Linares, Ana
Sent: Monday, March 26, 2007 2:08 PM
To: 'collinsA@fiu.edu'
Subject: FW: Dissertation Study

Attachments: Modification Linares A IRB#06-190 03 12 07.doc; e-mail Hispanic seniors.doc

Hello, Mr. Collins:

As part of my dissertation research I am examining the factors associated with successful Hispanic students at four different higher education institutions in Florida. To this effect, I would like to request from the FIU Registrar's Office either one of the following:
a) an electronic list containing names and e-mails of all FIU seniors, or
b) to send the attached e-mail to senior students with Hispanic surnames directing them to the following link: https://websurveyor.net/wsb.dll/89808/Successfactors.htm If you choose this option, please send me a copy of your e-mail for my records.

A copy of the most recent IRB document approving my study is also attached for your records.
I will always be grateful for your attention to my request.

Sincerely,

Ana G. Linares
Doctoral Candidate
University of North Florida

Appendix C

Institutional Review Boards Approvals

UNF
UNIVERSITY of
NORTH FLORIDA.

Office of Research and Sponsored Programs
4567 St. Johns Bluff Road South
Jacksonville, FL 32224-2665
904-620-2455 FAX 904-620-2457
Equal Opportunity/Equal Access/Affirmative Action Institution

MEMORANDUM

DATE: December 1, 2006

TO: Ana Linares

VIA: Dr. Janice Seabrooks,
            Exceptional Student and Deaf Education

FROM: Dr. Kathaleen Bloom, Chair,
            UNF Institutional Review Board

RE: Review by the UNF Institutional Review Board IRB#06-190:
            "Factors Associated with Successful Hispanic Students in Higher
            Education"

This is to advise you that your revised protocol, "Factors Associated with Successful Hispanic Students in Higher Education," has been reviewed by the UNF Institutional Review Board and has been approved (Expedited/Category 9).

This approval applies to your project in the form and content as submitted to the IRB for review. Any variations or modifications to the approved protocol and/or informed consent forms as they relate to dealing with human subjects must be cleared with the IRB prior to implementing such changes. Any unanticipated problems involving risk and any occurrence of serious harm to subjects and others shall be reported promptly to the IRB.

IRB approval is valid for one year. If your project continues for more than one year, you are required to provide an annual status report to the UNF IRB.

Should you have any questions regarding your project or any other IRB issues, please contact Nicole Sayers, Coordinator of Research Compliance, at 620-2498.

University of
Central
Florida
January 11, 2007

Office of Research & Commercialization

Ana Linares
University of North Florida
College of Education and Human Services
Schultz Hall, Bldg. 9
4567 St. Johns Bluff Road South
Jacksonville, FL 32224

Dear Ms. Linares:

As Chair of the University of Central Florida (UCF) Institutional Review Board (IRB), I accept the University of North Florida (UNF), Institutional Review Board's approval of the study, "Instrument for the Investigation of Factors Associated with Successful Hispanic Students in Higher Education." As stated in your letter, you will post flyers to recruit 35 UCF Hispanic students over the age of 18. Interested participants will report to the Student Union at UCF and complete an anonymous survey. You state that you have previously received permission to place the surveys in the Student Union from Ms. Carter in the Office of Student Involvement. Students will be compensated with a $5 store gift certificate for their participation, which will take approximately 20 minutes.

Please obtain UNF IRB approval of your protocol modifications for the use of UCF students before beginning the study here at UCF. The modifications include revising the study to allow only 35 UCF participants as well as a revised consent document and flyer. It is understood that the University of North Florida (IRB00001451, FWA 00000737) is the IRB of Record for this study (IRB. No. 06-190) as UCF is not considered "engaged" in this research. Local issues involving the UCF population should be brought to the attention of the UCF IRB as well for local oversight, if needed.

Should you have any questions, please do not hesitate to call the IRB office at 407-823-2901.

Please accept our best wishes for the success of your endeavors.

Sincerely,

Tracy Dietz, Ph.D., Chair
University of Central Florida IRB
(FWA00000351, IRB00001138)

Copy: UCF IRB records
Dr. Kathaleen Bloom, Chair, University of North Florida Institutional Review Board
Ms. Chantel Carter, Assistant Director, University of Central Florida,
Office of Student Involvement

From: IRB2 [mailto:irb2@ufl.edu]
Sent: Wed 11/29/2006 10:54 AM
To: Linares, Ana
Subject: Research at UF

Hello Ana,

You are authorized to proceed with your research at UF as described in
your protocol. If the nature of your study change in any way, please
contact our office. Should you have other questions, please let me know.

Denise Long
UFIRB - Grants Specialist
98A Psychology Building / Box 112250
University of Florida
Gainesville, FL   32611-2250

Fax: (352) 392-9234

Appendix D

Invitational Letters to Participants

February 28, 2007

Dear UNF Hispanic senior:

My name is Ana G. Linares, and I am a Doctoral Candidate at the University of North Florida. I am collecting data for my dissertation study entitled "Factors Associated with Successful Hispanic Students. If you are a UNF **Hispanic senior, with a cumulative GPA of 3.0 or above,** please go to the following website: https://websurveyor.net/wsb.dll/89808/successfactors.htm to complete a brief, anonymous survey. If you don't meet the established criteria, or have already completed this survey before, please disregard this letter. Those participating in this study may be contributing to the future college success of many other Hispanic students!

I take this opportunity to congratulate you for your academic success and wish you the very best in future endeavors.

With sincere appreciation,

Ana G. Linares
Doctoral Candidate
University of North Florida
(904)620-2436

March 20, 2007

Dear FIU Hispanic senior:

My name is Ana G. Linares, and I am a Doctoral Candidate at the University of North Florida. I am collecting data for my dissertation study entitled "Factors Associated with Successful Hispanic Students. If you are a UNF **Hispanic senior, with a cumulative GPA of 3.0 or above,** please go to the following website: https://websurveyor.net/wsb.dll/89808/successfactors.htm to complete a brief, anonymous survey. If you don't meet the established criteria, or have already completed this survey before, please disregard this letter. Those participating in this study may be contributing to the future college success of many other Hispanic students!

I take this opportunity to congratulate you for your academic success and wish you the very best in future endeavors.

With sincere appreciation,

Ana G. Linares
Doctoral Candidate
University of North Florida
(904)620-2436

April 7, 2007

Dear UF Hispanic senior:

My name is Ana G. Linares, and I am a Doctoral Candidate at the University of North Florida. I am collecting data for my dissertation study entitled "Factors Associated with Successful Hispanic Students. If you are a UF **Hispanic senior, with a cumulative GPA of 3.0 or above**, please go to the following website: https://websurveyor.net/wsb.dll/8980B/successfactors.htm to complete a brief, anonymous survey. If you don't meet the established criteria, or have already completed this survey before, please disregard this letter. Those participating in this study may be contributing to the future college success of many other Hispanic students!

I take this opportunity to congratulate you for your academic success and wish you the very best in future endeavors.

With sincere appreciation,

Ana G. Linares
Doctoral Candidate
University of North Florida
(904)620-2436

May 3, 2007

Dear UCF Hispanic senior:

My name is Ana G. Linares, and I am a Doctoral Candidate at the University of North Florida. I am collecting data for my dissertation study entitled "Factors Associated with Successful Hispanic Students. If you are a UCF **Hispanic senior, with a cumulative GPA of 3.0 or above**, please go to the following website: https://websurveyor.net/wsb.dll/89808/successfactors.htm to complete a brief, anonymous survey. If you don't meet the established criteria, or have already completed this survey before, please disregard this letter. Those participating in this study may be contributing to the future college success of many other Hispanic students!

I take this opportunity to congratulate you for your academic success and wish you the very best in future endeavors.

With sincere appreciation,

Ana G. Linares
Doctoral Candidate
University of North Florida
(904)620-2436

References

Allen, D. (1999). Desire to finish college: An empirical link between motivation and persistence. *Research in Higher Education, 40*(4), 461-485.

Allen, D., & Nora, A. (1995). An empirical examination of the construct validity of goal commitment in the persistence process. *Research in Higher Education, 36*, 509-533.

Arellano, A., & Padilla, A. (1996). Academic invulnerability among a select group of Latino university students. *Hispanic Journal of Behavioral Sciences, 18*, 485-508.

Astin, A. W. (1975). *Preventing students from dropping out.* San Francisco: Josey-Bass.

Astin, A., & Oseguera, L. (2003). *Degree attainment rates at American colleges and universities.* Los Angeles, CA: Higher Education Research Institute.

Baker, R., & Syrk, B. (1984). *Student Adaptation to College Questionnaire manual.* Los Angeles: Western Psychological Services.

Ballesteros, E. (1986). *The Chicano and equal educational opportunity. The relationship of school outcomes, family background, and high school outcomes.* Unpublished doctoral dissertation, University of California, Los Angeles, CA.

Bogden, R., & Biklen, S. (1992). *Qualitative research for education: An introduction to theory and methods.* New York: Simon and Schuster.

Bosher, S., & Rowekamp, J. (1998). The refugee/immigrant in higher education: The role of educational background. *College ESL, 8*(1), 23-41.

Cabrera, N., & Padilla, A. (2004). Entering and succeeding in the "culture of college": The story of two Mexican students. *Hispanic Journal of Behavioral Sciences, 26*(2), 152-170.

Caplan, N., & Nelson, S. (1973). On being useful: The nature and consequences of psychological research on social problems. *American Psychologist, 28*(3), 199-211.

Clark, M., Brooks, M., Lee, S., Pasquarella, L., Crawford, Y., & Maxis, S. (2006). Factors influencing the educational success of minority pre-service educators. *Journal of College Student Retention, 8*(1), 121-135.

Collier, V. (1989). How long? A synthesis of research on academic achievement in a second language. *TESOL Quarterly, 23*(3), 509-524.

Crisostomo, A., & Dee, J. (2001, November). Immigrants in U.S. colleges: What contributes to their academic success? Paper presented at the annual meeting of the Association for the Study of Higher Education, Richmond, VA. (ERIC Document Reproduction Service No. ED459676)

Chawkin, N., & Gonzalez, J. (2000). Mexican immigrant youth and resiliency: Research and promising programs. *ERIC Digest*, (ERIC Document Reproduction Service No. ED447990))

Chrispeel, J., & Rivero, E. (2001). Engaging Latino families for student success: How parent education can reshape parents' sense of place in the education of their children. *Peabody Journal of Education, 76*(2), 119-169.

Cronbach, L. (1951). Coeficient alpha and the internal structure of tests. *Psychometrika, 31,* 93-96.

Dale, P., & Zych, T. (1996). A successful college retention program. *College Journal, 30*(3), 354-360.

Darling-Hammond, L. (2007). The flat earth and education: How America's commitment to equity will determine our future. *Educational Researcher, 36*(6), 318-335.

Dennis, J., Phinney, J., & Chuateco, L. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development, 46*(3), 223-236.

Eskrom, R., Gaertz, M., Pollack, J., & Rock, D. (1986). Who drops out of school and why: Findings from a national study. *Teachers College Record, 87*(3), 356-373.

Esprivalo, P., & Scott, W. (2003). Ready or not here we come: Retaining Hispanics and first-generation students in post-secondary education. *Community College Journal, 26*(2),147-156.

Fields, C. (1988). The Hispanic pipeline: Narrow, leaking, and needing repair. *Change, 20*(3), 20-27.

Fleming, J. (1984). *Blacks in college: A comparative study of students' success in Black and White institutions.* San Francisco: Jossey-Bass.

Fry, R. (2003). *Latinos in higher education: Many enroll, too few graduate.* Washington, DC: Pew Hispanic Center. Retrieved from www.pewhispanic.org.

Garmezy, N. (1991). Resilience and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioral Scientist, 34*(4), 416-430.

George, D., & Mallery, P. (2006). *SPSS for Windows step by step: A simple guide and reference.* Boston: Pearson.

Gloria, A., Castellanos, J., Lopez, A., & Rosales, R. (2005). An examination of academic nonpersistence decisions of Latino undergraduates. *Hispanic Journal of Behavioral Sciences, 27*(2), 202-223.

Gordon, K. (1996). Resilient Hispanic youths' self-concept and motivational patterns. *Hispanic Journal of Behavioral Sciences, 18*(1), 63-73.

Grant-Vallone, E., Reid, K., Umali, C., & Pohlert, E., (2003). An analysis of the effects of self- esteem, social support, and participation in student support services on students adjustment and commitment to college. *Journal of College Student Retention, 5*(3), 255-274.

Hair, J., Anderson, R., Tatham, R., & Black, W. (1998). *Multivariate data analysis* (5th ed.). Upper Saddle River, NJ: Prentice Hall.

Harvey, W. (2001). *Eighteenth annual status report on minorities in higher education.* Washington, DC: American Council on Education.

Hassinger, M., & Plourde, L. (2005). "Beating the odds": How bi-lingual Hispanic youth worked through adversity to become high achieving students. *Education, 126*(2), 316-327.

Heller, C. (1996). *Mexican-American youth.* New York: Random House.

Hernandez, J. (2000). Understanding the retention of Latino college students. *Journal of College Student Development, 41*(6), 575-585.

Hernandez, J., & Lopez, M. (2004). Leaking pipeline: Issues impacting Latino college student retention. *Journal of College Student Retention, 6*(1), 37-60.

Hurtado, S. (1994). The campus climate: Contexts of conflict. *The Journal of Higher Education, 63*(5), 539-569.

Johnson, B., & Christensen, L. (2004). Educational research: Quantitative, qualitative, and mixed approaches (2nd ed.). Boston: Allyn and Bacon.

Jodry, L., Robles-Pina, R., & Nitcher, M. (2005). Hispanic academic advancement theory: An ethnography study of urban participants on a high school advanced diploma program. *The High School Journal, 88*(2), 23-32.

Keefe, S. E., Padilla, A. M., & Carlos, M. L. (1978). The Mexican American extended family as an emotional support system. *Human Organization*, 38, 144-152.

Lohfink, M., & Paulsen, M. (2005). Comparing the determinants of persistence for first-generation and continuing-generation students. *Journal of College Student Development, 46*(4), 409-428.

Lewis, O. (1959). *Five families*. New York: Basic Books.

Marin, G., & Marin, B.V. (1991). *Research with Hispanic populations*. Newbury Park, CA: Sage.

Markus, H., & Kitayama, S. (1991). Culture and the self: Implication for cognition, emotion, and motivation. *Psychological Review, 98, 224-253.*

Masten, A. S. (1994). Resilience in individual development: Successful adaptation despite risk and adversity. In M. Wang & E.W. Gordon (Eds.), *Educational resilience in inner city America* (pp. 3-25). Mahwah, NJ: Erbaum.

Maxwell, J. (2005). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: Sage.

McCaslin, M., & Murdock, T. (1991). The emergent interaction of home and school in the development of students' adaptive learning. In M. Maehr & P. Pintrich (Eds.), *Advances in motivation and achievement* (pp. 213-59). Greenwich, CT: JAI Press

McCloyd, V. (1990). The impact of economic hardship on black families and children: Psychological distress, parenting, and socioemotional development. *Child Development, 61*(2), 311-346.

McJamerson, E., & Lark, P. (1989, March). *Data-driven retention research: Using institutional research to inform institutional practice*. Paper presented at the meeting of the American Educational Research Association, San Francisco.

McMillan, J., & Reed, D. (1994). At-risk students and resiliency: Factors contributing to academic success. *The Clearing House, 67*(3), 137-141.

Muñoz, D. (1986). Identifying areas of stress for Chicano undergraduates. In M. A. Olivas (Ed.), *Latino college students* (pp. 147-149). New York: Teachers College Press.

Murguia, E., Padilla, R., & Pavel, M. (1991). Ethnicity and the concept of social integration in Tinto's model of institutional departure. *Journal of College Student Development, 32,* 433-439.

National Center for Public Policy and Higher Education. (2005). *Income of US workforce projected to decline if education doesn't improve.* Retrieved on June 10, 2006, from: http://highereducation.org reports/pa_decline/pa_decline.pdf.

National Research Council. (2006). *Multiple origins, uncertain destinies; Hispanics and the American future.* Panel on Hispanics in the United States. Washington, DC: The National Academies Press.

National Survey on Student Engagement (NSSE). (2002). Bloomington, IN: Indiana University.

Nora, A. (1990). Campus-based aid programs as determinants of retention among Hispanic community colleges. *Journal of Higher Education, 61*(3), 312-327.

Nora, A., & Cabrera, A. (1996). The role of perceptions of prejudice and discrimination on the adjustment of minority students in college. *The Journal of Higher Education, 67*(2), 119-148.

Nunnally, J. (1978). *Psychometric theory.* New York: McGraw Hill.

Nuñez, A., & Cuccaro-Alamin, S. (1998). *First generation students: Undergraduates whose parents never enrolled in postsecondary education* (NCES 98-082). Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.

Oliva, M., & Nora, A. (2004). College access and the k-16 pipeline: Connecting policy and practice for Latino student success. *Journal of Hispanic Higher Education. 3*(2), 117-124.

Ortiz, A.M. (2004). Promoting the success of Latino students: A call to action. *New Directions for Student Services, 105,* 89-97.

Padilla, R., Trevino, J., Gonzalez, K., & Trevino, J. (1997). Developing local models of minority student success in college. *Journal of College Student Development, 38* (2), 125-135.

Public Agenda. (2000). *Great expectations; Public and parents-White, African American, and Hispanic- view higher education.* Electronic copy retrieved from Highereducation.org/reports/expectations/expectations.pdf

Rak, C., & Patterson, L. (1996). Promoting resilience in at-risk children. *Journal of Counseling and Development, 7*(4), 368-373.

Ramirez, G. (1987). *Retention of the Latino student: Student affirmative action at CSULB).* Paper presented at the meeting of the National Association for Bilingual Education, Denver, CO.

Reid, L., & Radhakrishnan, P. (2003). Race matters: The relation between race and general campus climate. *Cultural Diversity and Ethnic Minority Psychology, 9*(3), 263-275.

Rendon, L., & Nora, A. (1989). A synthesis and application of research on Hispanic students in community colleges. *Community College Review, 17*(1), 17-24.

Rodriguez, C., Bingham, C., Morris, J., & Cardoza, D. (2003). Family or friends: Who plays a greater supportive role for Latino college students? *Cultural Diversity and Ethnic Minority Psychology, 9*(3), 236-250.

Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press.

Sabogal, F., Marin, G., Otero, R., & Marin, B. Hispanic familism and acculturation: What changes and what doesn't? *Hispanic Journal of Behavioral Sciences, 9*, 397-412.

Salermo, A., & Fink, M. (1992). *Home/school partnership: Migrant parent involvement report.* Geneseo, NY: BOCES, Geneseo Migrant Center. (ERIC Document Reproduction Service No. ED345915)

Sanchez, A., & Cardoza, D. (1995). *Educational aspirations of Hispanic parents: Some findings from the high school and beyond survey.* Technical Report R 29. Los Alamitos, CA: National Center for Bilingual Research.

Santiago, D., & Brown, S. (2004). *Federal policy and Latinos in higher education.* Washington, DC: Pew Hispanic Center. Electronic copy retrieved on May 16, 2006, from: www. Pewhispanic.org.

Santos, J. R. (1999). Cronbach's alpha: A tool for assessing the reliability of scales. *Journal of Extension,* 37(2), 1-5.

Santos, M. (2004). The motivations of first-semester Hispanic two-year college students. *Community College Review, 32*(3), 18-34.

Sorensen, S., Brewer, D., Carroll, S., & Bryton, E. *Increasing Hispanic participation in higher education: A desirable public investment.* Retrieved from http:/www.rand.org/publications/IP/IP152/

Stratil, M. (2006). *College student inventory: Form A.* Iowa City, IA: Noel-Levitz, Inc.

Sydow, D., & Sandel, R. (1998). Making student retention an institutional priority. *Community College Journal of Research & Practice, 22*(7), 635-643.

Taylor, J., & Miller, T. (2002). Necessary components for evaluating minority retention programs. *NASPA Journal,* 39(3), 266-282.

Terenzinni, P., Rendon, L., Upcraft, M., Millar, S., Allison, K., Greeg, P., & Romero, J. (1994).The transition to college: Diverse students, diverse stories. *Research in Higher Education, 35,* 57-73.

Terenzini, P., Springer, L., Yaeger, P., Pascarella, E.T., & Nora, A. (1996). First – generation college students: Characteristics, experiences, and cognitive development. *Research in Higher Education, 37,* 1-22.

Terenzini, P., & Wright, T. (1987). Students' personal growth during the first two years of college. *The Review of Higher Education, 10,* 259-271.

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research, 45,* 89-125.

Tinto, V. (1987). *Leaving college: Rethinking the causes and cure of student attrition.* Chicago: University of Chicago Press.

Tracey, T., & Sedlacek, W. (1984). Noncognitive variables in predicting academic success by race. *Measurement and Evaluation in Counseling and Development, 16,* 171-178.

University of North Florida, Office of Institutional Research. (2003). *Survey evaluation of UNF baccalaureate graduates Spring 2003.* Jacksonville, FL: Ronald J. Poland, Ph.D.

U. S. Department of Commerce, Bureau of the Census. (2000a). *Population by race and Hispanic or Latino origin, for all ages and for 18 years and over, for the United States: 2000.* Washington, DC: Department of Commerce.

U. S. Department of Commerce, Bureau of the Census. (2000b). *Educational attainment in the United States.* Washington, DC: U. S. Department of Commerce.

U. S. Department of Commerce, Bureau of the Census. (2004). *Current population survey annual social and economic supplement.* Retrieved from http://www.census.gov/population/sociodemo/hispanic1ASEC2004/Median_tab_04.xls

U. S. Department of Commerce, Bureau of the Census. (2005). *Educational attainment of the population 25 years and over by sex, Hispanic origin, and race.* Retrieved from http://www.census.gov./population/sociodemo/hispanic/ASEC2004/2004cps_tab6.1a.pdf

U. S. Department of Commerce, Bureau of the Census. (2006). *American community survey.* Retrieved from http://www.census.gov/population/www/socdemo/hispanic/hispanic_pop_presentation.html

U. S. Department of Education, National Center for Education Statistics. (1995-1996). *Beginning postsecondary students longitudinal study, first follow-up (BPS: 96/98).* Retrieved from http:// nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2000157-pdf

U. S. Department of Education, National Center for Educational Statistics. (2001). *Bridging the gap: Academic preparation and postsecondary success of first-generation students.* NCES 2001–153. Washington, DC. Retrieved from http://nces.ed.gov/pubs2001/2001153.pdf

U. S. Department of Education, National Center for Educational Statistics. (2003). *Status and trends in the education of Hispanics.* Retrieved from http://nces.ed.gov/pubs2003/2003008.pdf

U. S. Department of Education, National Center for Educational Statistics. (2005). *Total*

fall enrollment in degree-granting institutions, by race/ethnicity, sex, attendance ,status and level of student: Selected years, 1976 through 2005. Retrieved from http://nces.ed.gov/quicktables/result.asp?access=p&getfields=qttitle.qtstatcat.qtso urce.qtyear&output=xml_no_dtd&ie=UTF8&client=quicktables&q=Hispanic+en rollment+2005&requiredfields=keywords%3Aquicktable&filter=0&site=nces&oe =UTF-8&start=10

U. S. Department of Education, Council of Economic Advisers. (2000). *Educational attainment and success in the new economy: An analysis of challenges for improving Hispanic students' achievement.* (ERIC Document Reproduction Service No. ED442890)

Valenzuela, A. (2000). *Substractive schooling: U.S.-Mexican youth and the politics of caring.* Austin: University of Texas Press.

Valenzuela, A., & Dornbusch, S. M. (1994). Familism and social capital in the academic achievement of Mexican origin and Anglo adolescents. *Social Science Quarterly, 75*(1), 18-36.

Vernez, G., Krop, R., & Rydell, C. P. (1999). *Closing the education gap: Benefits and costs.* Center for Research on Immigration Policy. Santa Monica, CA: Rand Education.

Werner, E., & Smith, R. (1992). *Overcoming the odds: High risk children from birth to adulthood.* Ithaca, NY: Cornell University Press.

Wilson, S., Mason, T., & Ewing, M. (1997). Evaluating the impact of receiving university-based counseling services on student retention. *Journal of Counseling Psychology, 44,* 316-2320

Zimmerman, M., & Arunkumar, R. (1994). Resiliency research: Implications for schools and policy. *Society for Research in Child Development, 8*(4), 1-15.

Zurita, M., (2004). Stopping out and persisting: Experiences of Latino undergraduates. *Journal of College Student Retention, 6*(3), 301-324.

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Curriculum Vitae

EDUCATION

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1996   University of North Florida
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PROFESSIONAL EXPERIENCE

2004– Present - University of North Florida, Intercultural Center for PEACE
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Interim Director

February 2002-November 2003-
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Learning Resources Coordinator

February 1997-February 2002 –University of North Florida
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Retention Coordinator

ACADEMIC RESEARCH

2006- Doctoral Dissertation: *Factors Associated with Successful Hispanic Students in Higher Education.*

1996 – Master's Capstone Paper - *Hispanic Representation in Government: A Look at the Representation of Hispanics at the Local, State, and Federal Workforce in Relationship to Its Constituency.*

CERTIFICATES / AWARDS

2006 Completion of the three-credit hours course "Training Design." Intercultural Communication Institute, Portland, OR.

2006 Certificate of Completion of the three-credit hours course "Levering the Power of Diverse Communication Styles– Intercultural Communication Institute, Portland, OR

2005 Certificate of Completion of Intercultural Development Inventory training– Intercultural Communication Institute, Portland, OR.

2004 Certificate of Completion of the course "Foundations of Diversity Training" Intercultural Communication Institute- Portland, OR..

2004 Florida Governor's Point of Life Award for orienting the Hispanic students in Jacksonville high schools about the requirements and skills to go to college.

2002 H.A.C.E. Award for promoting the betterment of Jacksonville's Hispanic community in the area of Education.

2001 African-American Student Union. Certificate of Achievement Award for promoting cultural diversity among UNF students.

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