

INFLUENTIAL OR NOT: AN EXAMINATION OF THE INFLUENCE OF SOCIAL  
NETWORKS ON THE COLLEGE CHOICE PROCESS AND POST-SECONDARY  
ENROLLMENT RATE OF LATINA/O STUDENTS

By

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To my nieces and nephew(s): remember success isn't defined by whether you made it but based on everyone else who made it because of you.

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Abstract of Dissertation Presented to the Graduate School  
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This study investigates the role of social networks on the college choice process and postsecondary enrollment of Latina/o students. The data source for this study came from the Educational Longitudinal Study of 2002 administered by the National Center for Education Statistics, which provided information related to students' college choice process. Hossler and Gallagher's (1987) college choice process model and an adapted model of Perna's (2006) proposed conceptual model of college choice were used as the theoretical frameworks for this study.

Descriptive statistics and multivariate logistic regression techniques were utilized to examine the influence of individual factors and expectations of social networks on Latina/o students' college choice process and college enrollment rate based on a nationally representative sample. The results suggested that particular variables in Perna's conceptual model influenced Latina/o students' college choice process and college enrollment. Namely, Latina/o students who applied to multiple colleges, had parents who were not fluent English speakers, planned to enroll in a vocational school, and anticipated postponing college were less likely to aspired for a college degree.

Additionally, women were more likely to seek college information from their guidance counselor. Whereas Latina/o males and students whose native language wasn't English, who applied to only one college, planned to attend a vocational school, were first-generation, and who planned to postpone college were more likely not to seek college information from any source.

Findings from this study highlight that the Latina/o student population is not a monolithic group but rather a heterogeneous population. Researchers and administrators must recognize this and develop policies that meet the diverse characteristics presented among Latina/o students. Furthermore, high schools should implement college preparation programs and reach out to the Latina/o community in order to create a college going culture for this population. Finally, the role of guidance counselors, teachers, and parents should be further examined with a heightened focus on understanding how their expectations for Latina/o students differ from other racial groups.

## CHAPTER 1 INTRODUCTION

As the United States continues to change demographically, Latina/o students are becoming one of the dominant groups in K-12 classrooms, as well as in higher education. In 2007, Latina/os under the age of 18 became the second largest student group (Kohler & Lazarin, 2007). Given the fact that Latina/os now comprise the largest minority group in the United States - surpassing African Americans, 16% vs. 13%, respectively (Ennis, Rios-Vargas, & Albert, 2011), - more national attention should be given to the underrepresentation of Latina/o students in postsecondary education. Solorzano, Villalpando, & Oseguera (2005) captured the magnitude of the education disparity for Latina/o students when they reported, "of every 100 Latina/os that start off in elementary school, only 52 will graduate from high school, of those students, only 10 will graduate from college, 4 of which will continue to graduate school, and only a fraction of one person (0.4) will earn a doctorate degree" (p.279).

Unfortunately, although Latina/os who will comprise 24.4% of the U.S. population by 2030, it has been predicted that they will continue to have lower rates of degree attainment when compared to their White counterparts (Ennis, Rios-Vargas, & Albert, 2011). In 2007, Latina/os comprised 18% of the total college-age population. However, they only made up 10.4% of the graduating class of 2002 (Kohler & Lazarin, 2007). With college degrees replacing high school diplomas as the standard minimal attainment which is required for economic self-sufficiency and responsible citizenship (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008), it is essential that educators seek to understand the college choice process of Latina/o high school students. This would be an important

step towards assuaging the social and economic problems that will result from allowing Latina/o youth to grow into an undereducated and unskilled population.

Despite Latina/o students' progress in college enrollment, disparities and inequalities continue to exist for this population. According to the Census Bureau (2011), approximately 13.2% of Latina/os have a bachelor's degree or higher compared to 29.9% of White Americans. Although a growing number of Latina/o students are enrolling in college (25.8%), many more are dropping out without completing their bachelor's degree (Castillo, Conoley, Archuleta, Phoummarath, Landingham, & Choi-Perason, 2006; NCES, 2009). Between 2000 and 2008, the enrollment of Latina/o students in degree-granting institutions doubled from 1.4 million to 2.1 million, while White student enrollment increased by 14%, from 9 million to 10.3 million (Snyder & Dillow, 2009). With over half (54%) of college-age Latina/os attending two-year institutions, as compared to 25% of White students (Fry, 2002), there is still great room for improvement. Community college enrollment rates are much greater for Latina/o students over the age of 24. The issue with so many Latina/o students enrolling in community colleges is their retention and graduation rates, especially when it comes to transferring to four-year institutions (Fry, 2002). Overall, Latina/os are more likely than any other racial group to pursue paths that delay their college graduation by "attending school part-time, enrolling in two-year institutions, and/or delaying their college education into their mid-20s and beyond" (Fry, 2002).

Another group that has made great progress in college in recent decades are first-generation students (Choy, 2001; Strayhorn, 2006). According to Saenz and associates (2007), one-in-six first-year students at four-year institutions are considered

first-generation. However, this number does not take into account first-generation students enrolled at two-year institutions. Strayhorn's (2006) study provides a more accurate representation (30%) of first-generation student enrollment rates across all postsecondary institutions, not only four-year institutions. First-generation students, like Latina/o students, are more likely to attend two-year institutions (Chen, 2005), which is a critical factor for researchers to consider when examining the college choice process and college enrollment decisions of first-generation Latina/o students. It is also critical that researcher consider not only the type of institution (two-year versus four-year), but also the selectivity of the institution, as both factors are influential in key outcomes such as students' likelihood of earning a college degree as well as long-term social opportunities (Alon & Tienda, 2005).

The economic value of a college education to Latina/os, particularly first-generation Latina/o students, should not be underestimated. After all, the differences between college graduates and high school graduates continue to be propagated through annual earnings and employment opportunities. In 2009, the average median household income for bachelor's degree recipient was \$75,500 compared to \$39,600 for high school graduates (U.S. Bureau, 2012). Accordingly, Latina/o college graduates are likely to earn a higher salary when compared to those with only a high school diploma. A bachelor's degree is reported to be worth a million dollars more in lifetime earnings as compared to a high school diploma (Julian & Kominski, 2011). Even when taking student loans into consideration, significant differences in lifetime earnings remain (Baum et al., 2010). In addition to earning a higher salary, a college education is also correlated with employment opportunities (Institute for Higher Education Policy, 2005).

According to the U.S. Bureau of Labor Statistics (2012), workers over the age of 25 with a bachelor's degree experience a 4.4% unemployment rate compared to workers who only have a high school diploma who are twice as likely (9.2%) to be unemployed. Due to college graduates' transferable skills and their ability to acclimate to new settings, they're more likely to find employment than high school graduates. Thus, there are substantial benefits that result from an investment in higher education.

Moreover, an educated Latina/o workforce with higher earnings and a lower unemployment rate will benefit the United States as a whole. Within the past decades, the growth within the Hispanic population has transformed and will continue to influence and affect the United States' political, cultural, social, and economic domain. The Latina/o population increased from 35.3 million in 2000 (when this group only comprised 13% of the total U.S. population) to 50.5 million in 2010 or 16% of the total U.S. population - a 3% increase (Ennis, Rios-Vargas, & Albert, 2011). Although Latina/os continue to concentrate in traditionally Latina/o states such as, Texas and California, there has been a rapid increase in nontraditional states in the Midwest and Southeast (Kohler & Lazarin, 2007). As of 2010, 41% of the Latina/o population lived in the West, 36% lived in the South, 14% in the Northeast, and 9% in the Midwest (Ennis, Rios-Vargas, & Albert, 2011). The two states with the largest Latina/o population, Texas and California, have invested a great deal of money and resources in programs and research that will help to improve Latina/o students' college enrollment and graduation rates in their respective states.

While these two states have taken some initiatives to deal with the Latina/os educational crisis, many more states are not prepared to deal with the rapid influx and

growth of Latina/os within their states. For example, the Hispanic population more than doubled in eight states in the South: Alabama, Arkansas, Kentucky, Maryland, Mississippi, North Carolina, South Carolina, and Tennessee (Ennis, Rios-Vargas, & Albert, 2011). At the same time, “the Hispanic student population increased in the South from 5% to 17%, in the Mideast from 2% to 7%, in the Midwest from 2% to 7%, and in the Northeast from 6% to 14%” (Kohler & Lazarin, 2007, p.3). The state of South Carolina experienced the fastest growth, increasing from 95,000 in 2000 to 236,000 by 2010 (Ennis, Rios-Vargas, & Albert, 2011). There is an urgent need for every state to ensure all their residents understand the long-term benefits of higher education. Additionally, it is critical that state implement the necessary programs and policies in order to increase the educational attainment of Latina/o students within their respective state, and the country (Santiago, 2011).

These are common sense measures, as a college-educated labor force that includes the participation of Latina/os is considered necessary for the growth of the U.S. domestic economy (Badger, 2010) and to assist the United States in competing in the global market (Hispanic Alliance, 2010). The educational attainment of Latina/os is also important to President Obama’s ambitious agenda of having the U.S. lead the world in higher education degrees by 2020 (Gonzalez, 2010; Santiago, 2011). With the rise of technology in the past few decades, more jobs are transitioning away from manufacturing and towards a high-tech economy (Badger, 2010) that requires some college education. Unfortunately, less than 20% of Latina/o workers are employed in high-tech occupations (U.S. Bureau of Labor Statistics, 2009) with the vast majority concentrating in low-skill occupations. The discrepancy that exists between the

education and skills of Latina/os and the education and skills required for the U.S. workforce to effectively compete in the global market, suggests increased attention to Latina/o students' college enrollment and graduation rates is imperative.

An important aspect of this greater issue is understanding that, for many Latina/o students, college is not “simply the next, logical, expected...stage” (Terenzini et al., 1994, p.62) after high school. This tendency to not perceive college as the natural next step, in part accounts for the trend of so many Latina/o students entering college at a later age. Moreover, since many Latina/o students are the first in their family to attend college, the decision to enroll in college often represents a significant departure from their background and experiences. Enrolling in college exposes one to new academic and social climates (Terenzini, et al., 1994) that are often foreign to many first-generation students and families. However, not all students experience the college choice process the same way (Glick & White, 2004, Kim, 2004). Factors such as race, ethnicity, and generational status have been reported to mediate, to a certain extent, college choice decisions and outcomes for students (Ceja, 2001; Hamrick & Stage, 2004; P.A. Perez, 2007).

To better address the low college enrollment rates of Latina/o students, it is crucial to examine how these students make decisions about college. Two researchers that support this claim are Perez and McDonough (2008), who argue that “in further identifying how Latina/os come to formulate postsecondary plans and navigate their college choice decisions, we can enhance their educational opportunities” (p.250). As Perez and McDonough's study focused on high-achieving Latina/o high school students in California, further research is needed to determine whether the college choice

process is the same for all Latina/o students. In an effort to address this gap in the literature, the present study will focus on the college choice process of Latina/o students (both, first-generation or non) who were sophomore students in 2001-2002 in multiple states across the United States. With the ultimate aim of identifying and understanding those factors that contribute to Latina/o students' college choice process, this study examined the process that Latina/o students experienced when making decisions about college. These factors were examined in relation to how the expectations of certain social networks influence their college choice process.

### **Purpose of Study**

Given the disparity between Latina/o students' demographic growth and their college enrollment rates, it is essential to understand those factors that influence their college choice process in order to strengthen the educational pipeline for Latina/os. With many Latina/o students delaying college enrollment or not enrolling at all, it is important to know who is impacting those few Latina/o students to aspire and enroll in college after high school. Of those few Latina/os who enroll in college, the majority enlist in two-year institutions (Fry, 2002). As previously mentioned, the problem with enrolling in two-year institutions is the low rates of retention and college completion, especially among Latina/o students who often enroll part-time, delay college enrollment, and/or have multiple family obligations to attend to (Fry, 2002).

Although a substantial amount of research exists on those factors that influence the college choice process of both low-income and students of color, very few studies focus exclusively on first-generation Latina/o high school students. The purpose of this study is to examine how the college choice process of this population is impacted by the expectations' of specific social networks (i.e., parents, teachers, counselor, close

relatives, friends, etc.), as interpreted by the student, in addition to other variables. These factors will be examined in relation to students' predisposition, search, choice stage, and college enrollment (Hossler & Gallagher, 1987). Descriptive statistics and multilevel logistic regression analyses were performed on data gathered from the Educational Longitudinal Study of 2002 (ELS:02) conducted by the U.S. Department of Education, Institute of Education Statistics. The ELS:02 dataset initially surveyed tenth grade students in 2002 and followed-up biennially in 2004 and 2006. As the focus of the present study is on students' college choice progress, data was used from all three years in order to see how students' process evolved from 2002, 2004, and 2006.

### **Research Questions**

The research questions guiding this empirical study focus on identifying those social networks or individuals (i.e., guidance counselors, teachers, parents, close relatives, or friends) who contributed the most to the college choice process of Latina/o students. This study is designed to explore four research questions that pertain to the college choice process of Latina/o students:

- Does the expectations social networks have for Latina/o high school students, along with other key variables, influence students' degree aspirations?
- Does the expectations social networks have for Latina/o high school students, along with other key variables, influence who they're more likely to go to for college entrance information in both the 10<sup>th</sup> and 12<sup>th</sup> grade?
- Does the expectations social networks have for Latina/o high school students, along with other key variables, influence the primary reason students selected their chosen college?
- Does the expectations social networks have for Latina/o high school students, along with other key variables, influence their decision to enroll in college?

In examining the college choice process of Latina/o students, there are various conceptual frameworks to consider. However, for the purpose of this study it was

important to find a framework that included relevant factors identified in the literature as influential in the college choice process of first-generation students and Latina/o students. The decision to focus on first-generation Latina/o students was primarily driven by the fact that a large percentage of Latina/o students are considered first-generation college students. Additionally, this group is believed to face unique challenges above and beyond those experienced by students who have college educated parents. Two conceptual frameworks were selected based on their ability to capture the relevant factors of interest in this study: Hossler & Gallagher's (1987) three phase model of college choice, along with Perna's (2006) proposed conceptual model of student college choice. The selected frameworks will be discussed in greater detail in the following chapters. It is important to note that this study focuses on within group differences of a Latina/o student sample, in terms of income, parental education, parents' fluency in English, and high school type and urbanization. In other words, this study does not include a comparison between Latina/os and non-Latina/os on the variables of interest (Phinney, Dennis, & Chuateco, 2005).

### **Significance of Study**

Moreover, this study is significant because it capitalizes on those factors that influence Latina/o students' college choice process while in high school. This study further contributes to and expands on the limited literature that focuses on those factors that are most influential towards Latina/o students' college choice process. Due to the frequent migration patterns and high birth rates of Latina/os (1 of 5 school-age children is Latina/o), identifying those factors that impel or hinder Latina/o students' decision to enroll in college is a social and economic imperative (San Francisco Chronicle, 2009). Unfortunately, Latina/os also account for 24.3% of the population living in poverty

(Ramirez & de la Cruz, 2003). According to the U.S. Department of Health & Human Services (2013), the poverty line for a household of four is \$23,550, with the average size of Hispanic households being larger than non-Hispanic households, 3.47 people compared to 2.62 for the total population (American Community Survey, 2008). In addition to their high poverty rates, Latina/os' underrepresentation in higher education will become more problematic because by the year 2018 the United States will demand that 63% of the American workforce be college-educated (NALO, 2010). As the Latina/o population continues to increase they will form a crucial segment of American workers, taxpayers, parents, citizens, voters, and leaders (Population Reference Bureau, 2010).

It is projected that by 2050 one-third of the US population will be Latina/o (Population Reference Bureau, 2010). Unfortunately, if Latina/o students' achievement gap is not addressed the United States will have to pay a higher price. For example, the cost to US taxpayers for college dropouts among all first-time freshmen between 2003 and 2008 was 9 billion dollars (American Institutes for Research, 2010). The United States will continue to suffer an economic decline if Latina/os do not reach their potential human capital for an economy that will eventually require a baccalaureate degree from the majority of its workforce. If the U.S. is to continue to compete in the global economy then education which has long been the gateway to enhanced personal and social economic security must be made more accessible to Latina/o students.

This study is significant for many reasons and to a variety of stakeholders. For secondary and postsecondary administrators and educators, this study helps to better elucidate which non-academic factors and social networks are most influential and/or detrimental towards Latina/o students' college choice process and their decision to

enroll in college. For policymakers, this study will supply critical information regarding an institution's productivity in recruiting, retaining, and graduating first-generation Latina/o students. Armed with this information, policymakers can provide secondary and postsecondary institutions with the necessary funding to establish or support existing programs or initiatives that help increase Latina/o students' persistence and graduation rates. In addition, this study will help to provide practical recommendations to educational leaders regarding ways to address Latina/o students' achievement gap through institutional policies, programs, and support. All in all, this study will contribute to the existing literature and institutional initiatives pertaining to Latina/o students' college choice process and postsecondary enrollment.

It is critical that policymakers and educational leaders acknowledge that Latina/o students' low degree attainment is not only an individual issue but a national concern that contributes to a decline in the average income levels, lower average tax contributions, and an increase in the number of unfulfilled professional jobs (Museus, 2011). It is expected that "between 2000 and 2025 the White working age population will decline by five million as baby boomers retire from the labor force" (Fry, 2002, p.1). At a similar rate, Latina/os of working age are projected to increase by 18 million "thus; the vitality of the U.S. workforce greatly depends on Latina/os educational progress" (Fry, 2002, p.1). It is imperative that educators and policy makers become better informed and proactive in making the necessary decisions to help increase the college enrollment and graduation rates of Latina/o students.

### **Definitions of Terms**

There are various terms used throughout the literature that explain the college choice process of Latina/o students. While many of these terms may be used

interchangeably, many others should not be. Therefore, the following terms are defined so the reader can better understand the research study at hand and avoid any misinterpretation of pertinent terminology.

**Latina/os.** The most common term used, “Latina/o”, refers to people of Latin American descent, while the term “Hispanic” is a government-imposed label used since the 1970s to identify anyone who spoke Spanish or was a descendant of Spaniards. However, for the purpose of this paper these two terms (Hispanic and Latina/o) will be used interchangeably to refer to both male and female natives or descents of Spanish-speaking countries in South and Central America, including some of the Caribbean islands (i.e., Puerto Rico, Dominican Republic, and Cuba). Latina/os are often referred to as a homogeneous group that share much in common however; significant within group differences exist among Latina/os in a variety of domains to include social and economic status, educational attainment, and political views. Nonetheless, one thing Latina/o descents share in common is their history of Spanish colonization and native language, Spanish. Due to the shared history of colonization among Latin American countries, Spaniards are excluded as a Latino or Hispanic subgroup in this study.

**First-generation college student.** Some studies define “first-generation” as a student whose parents never enrolled in postsecondary education (Nunez & Cuccaro-Alamin, 1998; Pascarella, Pierson, Wolniak, & Terenzini, 2004). While other studies define first-generation as undergraduates whose parents have never obtained a bachelor’s degree but have some postsecondary experience (Engle & Tinto, 2008; Mendez, 2003). Still others define first-generation as a student whose parents never attended college nor have any older siblings who went to college before them (Rooney,

2008; Talavera-Bustillos, 1998). For the purpose of this study, “first generation college students” will refer to those students whose parents never obtained any form of postsecondary college degree (i.e., Associate of Arts/Science or Bachelor degree).

**College choice process.** The term “college choice process” refers to the process high school students go through when deciding whether and where to go to college. This study used Hossler and Gallagher’s (1987) three-phrase model of college choice to get a better understanding of how students make decisions about college attendance. The model divides the college choice process into three stages: (1) *predisposition*, the decision to go to college, (2) *search*, searching for general information about college and learning about certain institutions; and (3) *choice*, completing applications and choosing an institution for enrollment (A.F. Cabrera & La Nasa, 2000a; Hossler et al., 1999).

**Traditional college student.** For this study, this term will refer to full-time, first-time, bachelor’s degree-seeking students, enrolled in college within six months following their high school graduation (Knapp et al., 2007).

**Socioeconomic status (SES).** A combination of factors, including family income, parental education, and occupational status of parents, will be used to define socioeconomic status (Harwell & LeBeau, 2010). Socioeconomic status is often highly correlated with students’ access to both cultural and social capital, something many students from lower socioeconomic status lack (Walpole, 2003).

**Cultural capital.** Characteristics including language, cultural knowledge, and manners that result from an individual’s parents and their influence on an individual’s class status (Bourdieu, 1986).

**Social capital.** Capital connected to the number of people in an individual's social network and the amount of social, economic, and cultural capital these networks possess (Bourdieu, 1986).

**Social Networks.** Individuals who can directly transit or negotiate the transmission of institutional resources, information, and opportunities towards students' college choice process (Stanto-Salazar, 2004). However, for this study I will be referring to institutional gatekeepers, (i.e., school counselors, teachers, and athletic coaches), as well as parents, relatives, and friends, who contribute to students' college choice process through personal advice, support, or institutional resources.

### **Chapter Summary**

Chapter 1 highlights the consequences of the increasing disparities in enrollment in postsecondary education of Latina/o students and their rapid demographic growth. As more Latina/o students aspire to enroll in college, it is critical to understand their college choice process in conjunction with the influences social networks have on students' college choice process, among other variables. The purpose of this study was to examine the degree of influence certain social networks and non-academic factors have on Latina/o students' decision to enroll in college as traditional age students. In addition, as a heterogeneous group, attention was given to background differences amongst Latina/o students, such as parental education, native language, and high school background. The Educational Longitude Study of 2002 was utilized for this study because it provided the most comprehensive and recent source of national dataset related to high school students' college choice process.

## CHAPTER 2 LITERATURE REVIEW

More researchers are studying the college choice processes of Latina/o students especially in regards to their decision to enroll in college or not (Ceja, 2006; Hurtado-Ortiz & Gauvain, 2007; Rooney, 2008; P.A. Perez & McDonough, 2008). However, very few researchers have examined how the expectations of those individuals who may have the closest relationship with Latina/o students impact their college choice process. Learning more about this topic may help us to understand some of the decisions Latina/o students make about the college choice process, especially since more than half (55%) of Latina/o students tend to enroll in two-year colleges versus four-year institutions (Adelman, Daniel, & Berkovits, 2003). As previously mentioned, Latina/o students who start off at community colleges are less likely to transfer to a four-year institution and obtain their bachelor's degree (Admon, 2006; Benitez & DeAro, 2004; Laden, 2004). Attending college, more specifically four-year institutions, has proven beneficial over the lifetime of the individual.

The most common and recognized benefit that results from a bachelor's degree is higher income. The average income for someone with a bachelor's degree is \$57,026, compared to \$40,556 for those with some college education, but no degree (Julian & Kominski, 2011). The median income in 2010 of \$29,900 is much lower for individuals with only a high school diploma or its equivalent (U.S. Department of Education NCES, 2012, Indicator 49). A bachelor's degree is becoming an essential job requirement for many up and coming occupations. Within the past decades, eight of the 20 fastest growing occupations required a minimum of a bachelor's degree for employment (U.S. Bureau of Labor Statistics, 2009). The need for more college

educated Americans, in particular bachelor's degree recipients, is becoming more critical for the United States especially when it comes to competing in the global market. According to Adelman (2009), there is a growing concern that other countries will surpass the United States in the proportion of bachelor degree recipients they educate. In addition, there are many other benefits that come from a college educated society: healthier citizens, reduction in crime rates, decline in unemployment rates, an improved infrastructure, less dependency on government assistance, and an increase in political participation and volunteerism (Baum & Ma, 2007). Thus, a more educated society translates to a more powerful and wealthier country for the United States as a whole.

The purpose of this study is to examine the role that certain social networks or individuals have on Latina/o students' navigation of the college choice process. In this literature review, the first section will explore the demographic characteristics of the Latina/o population within the United States and provide context for the theoretical framework of this study. The second section provides an overview of the research literature done on first-generation and Latina/o college students. The overview includes studies that focus on the habitus (i.e., demographic characteristics, cultural capital, and social capital) of these two groups which are in accordance with Perna's conceptual model of student's college choice process. In the third section, the development of various college choice models that have impacted current research studies will be reviewed. The final two sections will provide a review of the main theoretical frameworks used for this study, as well as an overview of the literature that focuses on the various gatekeepers and/or social networks that influence Latina/o students' college choice process. This line of research will help us to further understand the college choice

process of Latina/o students, and their subsequent enrollment or lack thereof, at institutions of higher education. Afterwards, a brief summary of the theoretical frameworks used for this study will be provided. These studies include Hossler & Gallagher (1987) college choice model and Perna's (2006) proposed conceptual model.

### **Undergraduate Latina/o Students**

The characteristics of Latina/o students focus on a few of the elements that may help or hinder their college choice process. As mentioned earlier, it is important to note that there are significant differences among Hispanic college students, which will be explored in further detail through the examination of their college choice process. However, the purpose of this overview is not to focus on the differences between U.S.-born versus foreign-born Latina/o students but will provide a broad summary of all Latina/o undergraduate students in order to better comprehend their college choice process as a larger group. As with the differences in every other racial group, demographic characteristics will evolve (i.e., socioeconomic status, parents' educational attainment, generational status, gender).

### **Demographic Characteristics**

Even though they represent a substantially diverse ethnic group, the average Latina/o college student is American born, female, of non-traditional college age, and of lower socioeconomic status. With recent media coverage of the Development, Relief, and Education for Alien Minors, or as its better known, the DREAM Act, (Mack, 2011; Navarrette, 2010; Perez, 2010) the dialogue on Latina/o students in higher education has focused more attention on undocumented students. The proposed federal legislation (Dream Act) intends to provide undocumented students with the opportunity to attend college. Although the media has heavily covered undocumented students

throughout President Obama's administration, undocumented students comprise a small percentage of the Latina/o undergraduate population. Of those Latina/o students in college, 88% are U.S. born citizens and another smaller percentage (11%) are legal residents of their respective states (Santiago, 2007). Undocumented students' lack of representation in postsecondary institutions may have to do with their legal status and their inability to attend or pay for international college fees. While it is important to address undocumented students in the literature, the database used for this study does not provide such information. As further explained in the next chapter, participants were asked about their generational status, as well as that of their parents (i.e., U.S. citizenship or immigrants), but not for their legal status (i.e., documented vs. undocumented). Therefore, this particular characteristic (i.e., legal residents/citizens or undocumented) cannot be controlled for in this study and instead was excluded.

In addition to being U.S. born, the typical Latina/o college student is a female. Within the past years, the college enrollment of Latina/o students has steadily increased; however, Latina's enrollment rates have surpassed that of Latino males (Santiago, 2008). As of 2009, Latinas represented 57.8% of all Latina/o students in higher education (Saenz & Ponjuan). Some researchers such as Ceja (2001) and Talavera-Bustillos (1998) have taken into consideration the influence of gender on the college choice process. For example, Ceja (2001) examined the college choice process and destinations of first-generation Chicanas (i.e., U.S. born individuals of Mexican descent) enrolled at a large urban high school. All of the Chicanas in Ceja's (2001) study "were convinced that there were some gender...dimensions explaining why their parent's wanted them to stay home and not leave home to go to college" (p.154).

Talavera-Bustillos found similar gender issues among first-generation Chicanas, many of whom confronted expectations to stay home and begin raising a family.

While some researchers, like Ceja and Talavera-Bustillos (Contreras-Godfrey, 2009; Zarate & Gallimore, 2005; Saenz & Ponjuan, 2009) suggest that men and women experience the college choice process differently, many others report that gender has little or no effect on the college decision-making process of Latina/os (Hearn, 1991; Paulsen, 1990). Most recently, researchers like Saenz & Ponjuan (2009) have started to research Latino males' underrepresentation in higher education. Saenz and Ponjuan (2009) found that Latino males are less likely to enroll in college compared to Latinas due to the following factors: strong recruitment into the military, overrepresentation in the U.S. prison system, being labeled "learning disabled," a lack of male role models, and the expectation that they must provide financial support for their immediate family due to a sense of familismo and machismo presence. Familismo consists of maintaining close bonds with one's family, fulfilling familial obligations, and holding strong beliefs about familial support (Sabogal, Marin, Otero-Sabogal, Marin, & Perez-Stable, 1987; Suarez-Orozco & Suarez-Orozco, 1995). Machismo, on the other hand, comprises a strong or exaggerated sense of manliness, stressing attributes such as physical courage, virility, domination of women, and aggressiveness (Suarez-Orozco & Suarez-Orozco, 1995). Suarez-Orozco & Suarez-Orozco (1995) reported that feelings of duty and responsibility to the family could take priority over education, especially if the family is struggling financially. However, others have found familismo to be one of the most positive predictors of academic achievement (Portes, 1999).

Despite the increase in college enrollment of Latina/o students, the average Latina/o student is older than his/her peers. The traditional age of college students is between the ages of 18 to 24 (Synder & Dillow, 2009). Approximately 7% of Latina/o college students are of non-traditional age compared to 5% of White students (Fry & Eric Clearinghouse on Urban Education, N.Y. 2003). When looking at different racial groups, only 37% of Latina/o high school graduates enroll in college versus 50% of White students and 40% of African American students (Snyder & Dillow, 2009). The issue with students delaying college enrollment is that this decreases their chances of completing a bachelor's degree (Horn, Cataldi, & Sikora, 2006).

According to the research findings of Horn et al. (2006), undergraduate students who delay college enrollment are more likely to enroll at a community college (56%) versus 34% of undergraduates who enrolled at a two-year college after high school. After all, enrollment in a community college decreases the chances for any student, especially Latina/o students, to earn a bachelor's degree for various reasons (Admon, 2006; Laden, 2004). It has been suggested that outcomes of students who delay their college enrollment should not be compared with those who enroll in college after high school since one can argue that both groups differ in many aspects. Therefore, many college choice studies, including this study, have been careful to include only traditional college age students who enroll in college after high school and not non-traditional college students (Bers, 2005; Rooney, 2008). Further details on this topic will be provided in Chapter 3.

Moreover, the average Latina/o undergraduate student comes from a lower socioeconomic status. In particular, dependent Latina/o students tend to come from

families with lower income levels in comparison to all undergraduates (Santiago, 2007). Dependent students consist of individuals who are required to provide parental information or signatures on the Free Application for Federal Student Aid (FAFSA) [Federal Student Aid, 2010]. Santiago & Cunningham (2005) found that nearly 25% of dependent Latina/o students came from families with household incomes below \$40,000, compared to about 21% of all undergraduates in 2003-2004. To better understand the college choice process of low-income Latina/o students, many researchers have narrowed their focus towards this particular group (Collatos, Morrell, Alejandro, & Lara, 2004; Oliverez, 2006; Rooney, 2008). Nonetheless, some researchers have argued that factors other than parental income have been more influential in the college decision-making process of Latina/o students (A.F. Cabrera & La Nasa, 2000b; McDonough, 1997).

### **College Enrollment Behavior of Latina/o Students**

Giving the distinctive characteristics of Hispanic college students is not enough without also highlighting their college enrollment behaviors (Fry, 2012; Santiago, 2007). The college attendance behaviors of Latina/o students examines whether the students are enrolled in two-year or four-year institutions and whether they are studying part-time versus full-time. According to data from the U.S. Department of Education (ED, IES, & NCES, 2010) 47% of Latina/o students were enrolled in college as part-time students in 2009. Among the undergraduate student population, Latina/o students are the least likely to be enrolled in college full-time. For example, the part-time enrollment rate of other racial groups in the study were 37% for Whites, 40% for Blacks, 37% for Asian/Pacific Islanders, and 39% for American Indian/Alaska Natives (U.S. Department of Education ED, IES, & NCES, 2010).

Researchers such as Fry (2002) and Nora & Rendon (1990) have suggested that Hispanic students typically enroll in college part-time to help support their families financially. Hearn (1992) found that students from lower SES backgrounds are more likely to enroll in college part-time than students from middle or upper class backgrounds. Researchers have argued that Latina/os who enroll part-time differ characteristically from those who enroll full-time (Hearn, 1992; Terenzini & Pascarella, 1998). Unfortunately, the limited literature on the college choice process of Latina/o students focuses mainly on the ability of Latina/o student to successfully navigate the college choice process (Contreras-Godfrey, 2009; Talavera-Bustillos, 1998). Hardly any distinctions were made about their college enrollment status. In other words, many studies define “college choice success” in terms of Latina/o students enrolling in any postsecondary institution without much consideration about whether they enrolled part-time or full-time, at either a four-year or two-year institution, all of which would be influential on the ability of the students to graduate from college.

Nearly half of Latina/o students between the ages of 18 to 24 are enrolled in two-year institutions (Fry, 2012). This is larger than any other racial group. For example, only 27% of Whites, 37% of Blacks, and 22% of Asian American are enrolled in two-year institutions (Fry, 2012). Some researchers have asserted that SES status (Kao & Thompson, 2003; O’Connor, Hammock, & Scott, 2010) and less access to social capital (Admon, 2006) plays a role in Latina/o students’ high enrollment rates in two-year institutions versus four-year institutions. Also, the cost of tuition at community colleges is much lower than that of four-year institutions, which explains why many low-income students are attracted to two-year institutions. However, SES alone is not

sufficient for explaining the high rates of enrollment of Latina/o students in community colleges. Admon (2006) found that when taking low-SES into account for different racial groups, Latina/o students were still more likely than White or Black students to enroll in two-year institutions. Admon (2006) suggested that the type of social capital possessed by Latina/o students often results in a lack of information about college costs and financial aid which may result in their higher enrollment rates in two-year institutions compared to their White and African American counterparts.

Limited literature on the college choice process of Latina/o students who are enrolled in four-year institutions exist (Cohen, 2009; Contreras-Godfrey, 2009; P.A. Perez, 2007; Rooney, 2008). Most research studies focus on students' college choice process during high school (Anderson, 2008; Ceja, 2001; Carreras, 1998; Gomez, 2005; L. Gonzalez, 2007; Kao & Tienda, 1998; Oliverez, 2006; P. A. Perez, 2007; Wolf, 2007). As previously mentioned, many studies do not take into consideration the type of institutions (i.e., two-year or four-year) students are more likely to enroll in after high school (Anderson, 2008; Carreras, 1998; Gomez, 2005; Kao & Tienda, 1998; P.A.Perez, 2007; Wolf, 2007). Although it seems reasonable for researchers to focus on students' college choice process during their high school years (A.F. Cabrera & La Nasa, 2000a) some researchers have found an inconsistency between Latina/o students' postsecondary plans and their actual decision to enroll in college after high school. Additional research should focus on whether Latina/o students' successfully complete the college choice process and actually enroll in college. This type of research will help increase researchers and practitioners' knowledge based on Latina/o students' predisposition, search, and choice stage, as well as their college enrollment decision.

As suggested by Swail, Cabrera, Lee and Williams (2005c), it is essential to follow “students in the educational pipeline from the moment they and their families begin to aspire to postsecondary studies to the point of degree completion” (p.1) which is exactly what this study intends to do.

Furthermore, Perna (2000) argues for more studies to take into account the type of institutions (i.e., two-year or four-year) students intend to enroll in. While many studies have focused on the college choice process of Latina/o students who choose the community college route, more studies should focus on those Latina/os who have broken away from the norm and enrolled in four-year institutions (Admon, 2006; Benitez & DeAro, 2004; Laden, 2004). Also, a firsthand account of Latina/o students’ college choice process in four-year institutions will better inform secondary and postsecondary administrators and policymakers on ways to improve the college enrollment rates of Latina/o students at four-year colleges. While this study does not provided information on the type of institution Latina/o students actually enrolled in (i.e., two-year college, four-year college, or vocational) after high school, it does provided information on the type of college Latina/o students aspire to attend after high school. This information may be helpful to know, especially as it relates to Latina/o students’ college choice process.

### **First-Generation College Students**

The focus on Latina/o students’ college choice process is increasingly on first-generation students mainly because most Latina/o students are the first in their family to attend college (Nunez & Cuccaro-Alamin, 1998). An interest in first-generation college students may also come from this populations’ encounter with additional challenges to college access and completion rates compared to students who have college-educated parents (Ceja, 2001). This section presents a brief description of the demographic

characteristics of first-generation college students. In particular, first-generation college students at four-year institutions which is the ideal population of interest for this study. Unfortunately, since the data used for this study does not mention what type of institution, two-year or four-year, Latina/o students enrolled in after high school, this information is left unknown.

In a series of studies conducted by the National Center for Education Statistics (NCES) on the experiences of high school graduates and first-generation college students (Choy, 2001), findings indicated that students who had parents who were college graduates had an advantage over first-generation college students. Among that population of high school graduates, 59% of first-generation students enrolled in college by 1994 in comparison to 93% of students whose parents had a college degree (Choy, 2001). Although lower parental education reduces the likelihood of students enrolling in college, NCES stresses that this is not the only factor linked to college enrollment. Therefore, investigating first-generation students' college choice process can help lessen the influence of parental education (Choy, 2001). Swail et al.'s (2005c) found support for the NCES hypothesis after discovering that first-generation Latina/o students were as likely to complete a bachelor's degree as students with college-educated parents once academic preparation and aspiration were controlled for.

While the national average enrollment rate of first-generation freshman students in 2005 was 16%, the proportion was much higher for Latina/o students at 38% and 23% for African Americans (Saenz et al., 2007). Whereas all racial and ethnic groups have shown a decline in the representation of first-generation students, the proportion is the highest for Latina/o students and the lowest for White students (Saenz et al., 2007).

Saenz et al. (2007) speculate that this may have to do with Latina/o students' overrepresentation in community colleges and their lack of access to four-year colleges. Findings in the study by Saenz et al. (2007) reveals that first-generation students are more likely to do the following: attend college because their parents want them to; work in order to pay for college; attend college to increase their income; and take into account financial factors when choosing a college.

Unsurprisingly, first-generation students are less likely to live on campus. They are also less likely to be academically self-confident, especially in their self-rating of math and writing ability (Saenz et al., 2007) which impacts the type of institutions they choose to enroll in. The problem with first-generation students not living on campus is their increase chances of not being retained. After all, research has shown that student involvement and living on-campus are significant factors in students' retention and success rate (Astin, 1973; Astin, 1999; Bozick, 2007; Tinto, 1994). This is particularly true of residence halls since many provided students with academic support, leadership opportunities, and peer interaction, in addition to close proximity to campus, which helps to promote student retention (Li, Sheely, & Whalen, 2005). Unfortunately, with over half of Latina/o students enrolling at community colleges, the likelihood that they will live on campus is small since on-campus housing is rare among two-year institutions.

### **Characteristics of Latina/o Students: Review of the Literature**

Before one can fully understand Latina/o students' college choice process, it is essential to first discuss who Latina/os are, as well as their place in American society. A brief description of Hispanic immigration, social and cultural capital, and language context will be provided to understand how these contexts may or may not shape the college choice process of Latina/o students. Without adequate knowledge about these

characteristics, practitioners and policymakers can make incompetent decisions concerning outreach, recruitment, admissions, and retention programs that affect this population. In the literature, Latina/os are often grouped together and treated as a homogenous group who share similar histories, struggles, and experiences.

Unfortunately, Latina/os vary in every aspect of the spectrum, with migration alone varying among each different Latina/o subgroup. As a result of the various migration patterns of different Latina/o subgroups, and their native country's relationship with the United States, one can argue that the educational attainment of specific Latina/o subgroups have been impacted, to a certain extent, by these foreign relationships.

### **Latina/os Migration Patterns**

Mexican Americans account for over half (63%) of the Latina/o population in the United States (Ennis, Rios-Vargas, & Albert, 2011). For generations, several Mexican families have lived in modern-day U.S. states such as, Arizona, Utah, Nevada, California, Texas, New Mexico, and parts of Colorado and Wyoming which were ceded by the United States from Mexico in the 19<sup>th</sup> century. However, the majority (58%) of Mexicans arrived in the U.S. in the 1990s or later, with 37% arriving within a decade of the 1990s (U.S. Census Bureau, 2007). Even today, the majority of Mexican-Americans reside in states located on the West coast, in particular California and Texas which account for 61% of the Mexican American population (Ennis, Rios-Vargas, & Albert, 2011). According to Portes and Rumbaut (2006), Mexican migration began in the early 20<sup>th</sup> century due largely to the Mexican Revolution, and the recruitment of Mexican workers by U.S. growers and railroad companies. Today, Mexicans account for about 30% of the U.S. immigrant population, including naturalized citizens and noncitizens, regardless of their immigration status (U.S. Census Bureau, 2009).

During the 20<sup>th</sup> century, the Mexican government twice entered into an agreement with the United States to export Mexican workers as contract laborers while American soldiers fought overseas, in both World War I and WWII. However, increases in a nativist climate and an economic downturn in the U.S. resulted in the elimination of these contracts and the creation of the U.S. Border Patrol, along with other immigration laws which restricted the flow of Mexican immigrants into the U.S. (Durand & Massey, 1992). Eventually, this resulted in an increase in illegal immigration from Mexican migrants who entered into the United States. Today, 60% of all unauthorized immigrants to the United States come from Mexico and about 62% of all Mexican immigrants were unauthorized in 2009 (Passel & Cohn, 2010). The majority of Mexicans migrated to the United States for economic reasons. They end up in a workforce which overwhelmingly consists of manual workers who possess limited skills and have low levels of schooling (Portes & Rumbaut, 2006). Consequently, migrants' educational and occupational statuses negatively affect their children's academic performances and overall educational attainment (Portes & Rumbaut, 2006).

As previously mentioned, Latina/os do not all share the same migration history. For example, the second and third largest Latina/o subpopulations consist of Puerto Ricans (9%) and Cubans (4%) [Ennis, Rios-Vargas, & Albert, 2011]. Unlike the rest of Latin America, Puerto Rico has been an unincorporated territory of the United States since 1898, and in 1917 Puerto Ricans were granted U.S. citizenship. Thus, Puerto Ricans have the luxury to travel back and forth without any migration issues. Puerto Ricans have been migrating to the states since the 19<sup>th</sup> century. Nevertheless, Puerto Ricans have kept a strong hold on their Puerto Rican identity by preserving their cultural

heritage and their native language, Spanish, while simultaneously resisting American cultural influences (Brick, Challinor & Rosenblum, 2011). Contrary to Mexican Americans, who mainly reside in Western states, the majority of Puerto Ricans have settled in New York, with a growing Puerto Rican community in central Florida (Ennis, Rios-Vargas, & Albert, 2011).

Idiosyncratically, Cubans also differ in regards to migration patterns. Although Cubans have been migrating to Florida since the Spanish colonial period, with smaller waves coming in the early 20<sup>th</sup> century, a large influx of Cuban migration started during the post-Castro revolution (Luis-Brown, 1967; Mendez, 1994). After the Cuban revolution, led by Fidel Castro in 1959, which resulted in his association with the Soviet Union and the introduction to communism, thousands of Cubans left Cuba and migrated to the United States. The first wave of Cubans to migrate to the United States, after the post-Castro revolution, consisted mostly of highly educated upper and middle class Cubans (Mendez, 1994). Contrary to other Hispanic immigrant groups, Cubans were well received by the United States government and admitted into the U.S. as political refugees. The U.S. anti-communist sentiments and their opposition to the Soviet Union influenced the American government to establish many programs to assist Cuban refugees. For example, the Cuban Refugee Program established by the President of the United States in 1961 provided direct financial assistance to Cuban refugees via public assistance, Medicare, free English courses, employment opportunities, scholarships, and low-interest college loans (Mendez, 1994; Luis-Brown, 1967).

Many Cuban refugee doctors were also allowed to take a refresher course offered at the University of Miami Medical School (Thomas, 1963) in order to regain

their medical credentials. Upon completion of this course and upon passing the Educational Council for Foreign Medical Graduates examination (ECFMG), these Cuban doctors continued to practice medicine under the supervision of an American doctor (Thomas, 1963). Many other Cuban professionals were given refresher courses, training, and educational opportunities to continue to work in their field. Cuban Americans are the only Latina/o subgroup whose educational credentials were accepted and validated by the U.S. government, giving Cubans an advantage over other Latina/o subgroups to succeed in American society. In addition to federal assistance, the inner drive and agency of the Cubans helped them prosper as a community especially, in Miami, Florida. The different migration patterns and history among Latina/o communities is one of many examples of how diverse the Latina/o population really is. However, the intention of Chapter 2 is not to make a comparison between the three largest Latina/o population groups but to be cautious about the interpretations and generalizations of the literature in reference to Latina/o students' experiences. After all, not all Latina/os are first-generation students or come from working class families. As previously mentioned, the college graduation rate for Cuban Americans is above the national average, surpassing White Americans (Census Bureau, 2011).

The purpose of this study is to include all Latina/o groups. However, many of the studies referenced in Chapter 2 are based exclusively on a Mexican-American sample. Unlike Puerto Ricans and Cubans, who are mainly concentrated in one or two specific cities and states, Mexican Americans who account for over half (65%) of the Latina/o population, are concentrated in multiple cities and states. For example, in a recent study, researchers noted that 68% of the Cuban population live in Florida and 23% of

Puerto Ricans reside in New York (Ennis, Rios-Vargas, & Albert, 2011). Therefore, it is reasonable to conclude that studies which use the broad term of “Latina/o” or “Hispanic” are likely to include a large sample of Mexican American students. Thus, expanding the literature review of Mexican Americans to be inclusive of other Latina/os is justifiable. For the remainder of Chapter 2 and for the purpose of this study, Latina/os will continue to be talked about as one group.

In the 21<sup>st</sup> century, the growth in the Latina/o population was mainly due to the births of existing residents (60%) as opposed to Latina/o immigrants (40%) (Fry, 2008). Nonetheless, a large percentage of Latina/o students are very close to the immigration experience, even if they are not immigrants themselves, since many are the children or grandchildren of migrants (Pew Hispanic Center, 2009; Zwick & Sklar, 2005). Of those Latina/o students enrolled in college, 88% are U.S.-born citizens (Santiago, 2007). Unfortunately, many Latina/o students lack the social and cultural capital to know about the value of college and the admissions process (McDonough, 1997) since many of their parents have less than a high school education.

As a result, many researchers (Ganderton & Santos, 1995; Glick & White, 2004) have examined whether there is a relationship between the generational status of immigrants and Latina/o students’ participation in higher education. Researchers have found that Latina/os who are born in the U.S. attend college at a much higher rate than those who were immigrants (Rong & Grant, 1992; Feliciano, 2002). Ironically, some researchers have found that college attendance for Latina/o students does not increase with successive generations of U.S. residency (Hagy & Staniec, 2002; Rong & Grant, 1992). As commonly expected, Rong and Grant found Latina/o immigrants graduate

from college at a much lower rate compared to second-generation Latina/os (U.S. born Latina/os with one or more immigrant parent). However, Rong and Grant did not find similar results among second and third-generation Latina/os. On the contrary, they found third-generation Latina/os (U.S.-born Latina/os with both parents born in the U.S.) graduate from college at a much lower rate than second-generation Latina/os.

Researchers should study whether a difference exists between third-generation Latina/o students whose parents are college-educated and those whose parents are not.

### **Social and Cultural Capital**

Other important factors that influence Latina/o students' postsecondary choices include social and cultural capital (Ceja, 2006; Cohen, 2009). According to Bourdieu (1986), social capital is measured based on the quality of resources one has access to through their relationships with others or membership in a group. Bourdieu argued that "the amount of social capital one possesses greatly depends on the size of the network of those connections and the volume of the capital possessed by those whom one is connected to whether it be economic or cultural" (Saunders & Serna, 2004, p.147). In the educational context, social capital refers to the ability for social networks to facilitate educational advancement for students (Bourdieu, 1986; Stanto-Salazar, 2004) whether it be through their peers, educational agents, community members, friends, and/or family members. For example, students greatly benefit from the relationships they establish with the gatekeepers of their institutions, such as teachers, counselors, and other school personnel, because they can help them navigate the college choice process or direct them to other resources, since many are college graduates themselves. Institutional gatekeepers consist of anyone (school personnel) who can directly transit or negotiate the transmission of institutional resources and opportunities

towards students (Stanto-Salazar, 2004). It is through these social networks that Latina/o students are given the opportunity to acquire the necessary skills and knowledge to persist in college and “begin to accommodate a college-going identity” (Saunders & Serna, 2004, p.148). When given the necessary social and cultural capital, Latina/o students are as likely as White students to enroll in college (L. Perna, 2000).

According to Rios-Aguilar and Deil-Amen’s (2012) study, Latina/o students are more likely to “transition successfully through college if they either reconfigure their social networks or create new ones” (p.180). Therefore, it is important for researchers to study the nuances of students’ social network relationships in secondary schools and to find ways students can create new relationships with college personnel. A growing body of research indicates that school counselors serve as social capital for high school students in terms of providing them with information and services that will help students apply to and be admitted to college. This is specifically true for Black and Latina/o students (McDonough, 2004; Bryan, Moore-Thomas, Day-Vines, & Holcomb-McCoy, 2011). Institutional gatekeepers provided more than just resources to students, they provided valuable information, norms, and support (Coleman, 1988). To other students, educational gatekeepers serve as a social resource who can provide them with technical, psychological, cognitive, and informational assistance (Bryan et al., 2011). Thus, when it comes to obtaining college information, educational gatekeepers “may provide the only source of social capital for low-income students and students of color who are first-generation college students” (Bryan et al., 2011, p.191).

Rios-Aguilar and Deil-Amen (2012) also found that Latina/o students were strongly encouraged by their social networks to attend college. However, upon

enrollment in college, many of their old social networks provided little guidance in planning for professional, career, and postgraduate options after college. This is why it is critical for postsecondary institutions to offer Latina/o students more opportunities to establish new relationships with institutional agents that can help them transition into college, and afterwards into the workforce or graduate school. After all, “Latina/os low college enrollment rates may be attributed to lower levels of access to the types of social capital required for college enrollment” (Saunders & Serna, 2004). Perna (2006) suggested that a primary function of social capital is to enable students to gain access to other forms of capital, such as cultural capital and institutional resources and support.

Moreover, cultural capital refers to general characteristics, such as skills, knowledge, and traits that tend to be derived from one’s parents and individual class status (L. Perna, 2006). One form of social capital that may be helpful to promote college enrollment consists of those students who have information in their homes about college (L. Perna, 2006). Similarly, students who have knowledge about higher education possess some form of cultural capital which is considered necessary for many students’ enrollment in college (L. Perna, 2006). Many researchers have suggested that the college decisions of Latina/o students are limited because many lack the type of social and cultural capital valued or needed in the college choice process (L. Perna & Titus, 2005; L. Perna, 2000). Thus, if members of the upper class tend to possess the most valued kinds of cultural and social capital (Bourdieu & Passeron, 1990; McDonough, 1997), then SES must be taken into consideration when discussing these particular issues related to Latina/o students. SES is commonly measured by parental income (Hearn, 1991) or includes parental income and education (A.F. Cabrera

& La Nasa, 2000b; Kurlaender, 2006). In Swail, Cabrera, Lee, and Williams' (2005a, 2005b, 2005c) three-part series on Latina/o students in the educational pipeline, the researchers found family income to be a major predictor of educational attainment among Latina/o students. Students' SES had a significant impact on their postsecondary degree completion (Swail et al., 2005). Ganderton and Santos (1995) also found that an increase in SES increased Latina/os' probability of attending college.

If SES does play a role in Latina/o students' college attendance rate, then many Latina/os may be at a great disadvantage. In general, Latina/o students come from families that are financially underprivileged when compared to the general population. According to the Census Bureau (2012), the average annual earnings of Latina/os households is \$38,624, well below the average earnings for all Americans of \$50,054 in 2011. The highest level of education for the average Latina/o, age 25 and older, is a high school diploma (62.9%), while the highest level of education for the average American is some college (Census Bureau, 2011). These findings highly suggest that the low socioeconomic status of Latina/os may have something to do with their low educational attainment levels.

### **English Proficiency**

Another common explanation found in the literature for Latina/os' low postsecondary participation rates is that for a majority of Latina/o students, they live in a household where they, or in particular their parents, struggle with the English language. There are three common explanations found in the literature on how Latina/o students' lack of English proficiency impacts their college choice process. First, some researchers have argued that Latina/o students who do not speak English fluently may not perform well on standardized tests (Altshuler & Schmutz, 2006; Pennock-Roman, 1990). Other

researchers have speculated that students' poor academic performance may discourage some Latina/o students from continuing their education beyond high school (Zarate & Gallimore, 2005). A third explanation is that Latina/o parents who speak limited or no English at home may be unable to assist their children through the college choice process and be unable to communicate effectively with high school or college personnel about college requirements and financial aid information (Ceja, 2006, Hurtado-Ortiz & Gauvain, 2007). However, other researchers argue that Latina/o students' lack of English proficiency is not a primary reason for the low college enrollment rates of Hispanic students (Pew Hispanic Center, 2010). After all, 88% of U.S.-born adult children report that they speak English fluently (Hakimzadeh & Cohn, 2007), despite their parents' proficiency in English.

### **Introduction to College Choice Process**

Throughout the college choice literature, researchers have used various theoretical frameworks and models to provide insight on the stages students go through when making decisions about whether and where to enroll in college (Bergerson, 2009a) along with the factors that influence these decisions. Some frameworks and models have examined students' choice of which college to attend (Chapman, 1981; Litten, 1982), others have explained students' decisions on whether they should actually attend college (Kotler & Fox, 1985), and many others have described the entire college choice process (Hossler & Gallagher, 1987; L. Perna, 2006). The first half of this section starts off with a brief overview of the early theoretical frameworks used for the college choice process, throughout the literature. The second portion looks at the development of models that attempt to explain the college choice process, along with studies that used such models.

## **Early Theoretical Frameworks**

The descriptions of the college choice process have been based on three theoretical frameworks: psychological, sociological, and economic (Paulsen, 1990). The psychological framework focused on how environmental, institutional, and student characteristics of a college environment impacts student enrollment (Paulsen, 1990). More specifically, environmental characteristics included the population of college students, along with employment opportunities for college graduates versus non-college graduates. Institutional characteristics included the admissions' selectivity and tuition cost of postsecondary institutions and how this influences what type of students get admitted to which institutions based on these characteristics. As for the component dealing with student characteristics, this includes parental education and income (Paulsen, 1990). The last two characteristics (i.e., institutional and student characteristics) will be further discussed, especially how they apply to this study.

Whereas the psychological framework focuses on the institutional component, the sociological point of view focuses on the student. The sociological perspective examines the formation of students' college aspirations through the influence of their personal characteristics. These characteristics included scholastic aptitude (Chapman, 1981), socioeconomic status (Chapman, 1981; Hearn, 1988) and parental income and education (Litten, 1982). Research studies that use the sociological theoretical framework suggested that students' predisposition to attend college was influenced by their background characteristics (Hossler & Stage, 1992; Kao & Tienda, 1998). The sociological framework is salient to this study, especially as it pertains to Latina/o students' college aspirations, socioeconomic status, and parental education.

Similar to the sociological framework, the economic viewpoint focuses on the student. However, the economic perspective views college choice as an investment-like decision process, where students take into account the perceived monetary benefits and cost of college attendance (Paulsen, 1990). Through the economic framework, students decide to invest in college if the expected benefits outweigh the costs (Paulsen, 1990; L. Perna, 2006). St. John's (1990) study on High School and Beyond (HSB) used a sophomore cohort to uncover how tuition and financial aid affects students' enrollment decisions. The researcher found that any form of financial aid assistance promoted enrollment among students, particularly grant aid. Unlike the two other frameworks, the economic perspective is the least talked about in this study, because few variables pertaining to Latina/o students' investment-like decision process were included in the national database used for this study.

### **Development of College Choice Models**

These three theoretical frameworks provided the core foundation for the development of various conceptual models that have helped to study the college choice process of high school and college students. Chapman's (1981) theoretical model takes into account several students' characteristics, such as socioeconomic status, academic aptitude and performance, and educational aspirations. The research also identified external influences, such as college characteristics, the influence of significant individuals (i.e., social networks or gatekeepers), and colleges' efforts to communicate with students, as being influential in the decision by students about which college to attend. Chapman's model was developed to "assist college administrators responsible for setting recruitment policy to identify the pressures and influences they need to consider in developing institutional recruiting policy" (Chapman, 1981, p. 490).

Litten (1982) expanded on Chapman's (1981) model and identified additional background characteristics, such as race, sex, ability level, parents' educational levels, and geographic location. Litten examined the different ways students approached and participated in the college choice process and found differences in the timing of the process. For instance, he identified how parental education influenced students' college selection process, along with the various ways college information was obtained. Litten suggested that further research should be conducted on how students' attributes affected their college selection process. Moreover, the majority of studies have used the college choice process known as the three phase model (Hossler & Gallagher, 1987; Bergerson, 2009a). Based on a simplification of previous work, the model summarized the college choice process into three stages: (1) predisposition consists of the decision to attend college instead of taking a different path; (2) search pertains to students' search for general information about college and learning about specific institutions; and (3) choice consists of students completing college applications and selecting a specific institution to attend (A.F. Cabrera & La Nasa, 2000a; Hossler et al, 1999).

Hossler and Gallagher's (1987) model has provided the layout for additional research to examine the college choice process of students from various backgrounds. For example, Hurtado, Inkelas, Briggs, and Rhee (1997) used concepts from Hossler and Gallagher's model to study the college application behaviors of various racial and ethnic groups. Before the 1990s, most of the research on the college choice process was based on the misleading assumption that all groups had equal access to college. However, more researchers have examined the significant differences in educational attainment across racial/ethnic and socioeconomic status (Bergerson, 2009a). Building

on Hossler and Gallagher's (1987) model, other researchers like Nora and Cabrera (1992) developed a model that outlined factors influencing each of Hossler and Gallagher's stages and provided outcomes for each stage. An additional extension of the model by Hossler and Gallagher includes that of A.F. Cabrer and La Nasa (2000b). This model incorporated a phase known as *when* (i.e., which grade level) the college choice stages took place. By taking into consideration grade level, influential factors, and outcomes, both new models have demonstrated the flexibility of Hossler and Gallagher's model and how college enrollment patterns can be improved by helping students at each stage of their college choice process.

Up to the 1990s, the college choice research was mainly shaped by three perspectives: sociological, psychological, and economic (Paulsen, 1990). The psychological perspective emphasized the environment of an institution, whereas the sociological approach examined college aspiration as part of a general attainment status. And finally, the economic perspective viewed college choice as an investment-like decision process. The 1980s, on the other hand, saw a number of conceptual models being developed for studying the college choice process of students, in particular Chapman's (1981) model and Hossler and Gallagher's (1987) model. The majority of college choice literature continues to use Hossler and Gallagher's three phase model to examine students' college choice process. However, to further assist in the complexity of the college choice process for students of diverse backgrounds, Perna's (2006) model will be used in this study in conjunction with Hossler and Gallagher's (1987) model.

### **Outline of Perna's Proposed Conceptual Model**

A more recent model, proposed by Perna (2006), integrates aspects of economic and sociological approaches on students' college choice. Perna's (2006) conceptual model makes the assumption that student enrollment decisions are connected to their "situated context" and therefore, there are numerous paths that may lead to college enrollment. The proposed conceptual model (see Figure 2-1) is centered on the economic perspective which argues that college choice decisions are based on the evaluation between the expected benefits and the expected cost of college. Unlike Hossler and Gallagher's model (1987), the four layers in Perna's proposed conceptual model (2006) are not stages but rather interactive throughout the entire college choice process. Perna provides four "contextual layers" (p.116): (1) an individual's habitus; (2) a school and community context; (3) a higher education context; and (4) a social, economic, and policy context, which consist of the sociological perspective. Utilizing the multiple layers of Perna's model allows researchers to investigate various constructs related to the college choice process which come from both the sociological and economical models.

Perna's conceptual model was selected as one of the two theoretical frameworks used in this study due to inclusiveness of the diverse college student age population. Perna noted that many of the earlier models relied exclusively on quantitative data and often excluded the introspective data that typically emerges from qualitative data (Bergerson, 2009; L. Perna, 2006). Perna incorporated both qualitative and quantitative studies when developing her proposed conceptual model. Her model takes into consideration students' different needs and suggests that students will navigate the college choice process at different rates. This differs from earlier models that suggest all

students pass through certain stages at specific times (Bergerson, 2009). In spite of not being a linear model like Hossler and Gallagher (1987), Perna still suggests that possible outcomes such as saving for college and academically preparing oneself are key factors for a successful college choice process (L. Perna, 2006). Although, Perna's model is relatively young, it has already started to impact how researchers study the college choice process and allows for various factors to be addressed all at once, whereas previously, they could only be studied in isolated situations (Engberg & Wolniak, 2009; Steinberg, Piraino, & Haverman, 2009).

### **Layer One**

The first layer, individual habitus, consists of students' internal sets of thoughts, beliefs, and perceptions that develop from the environment a student is most associated with. Collectively, these factors can influence the aspirations and attitudes that students have about postsecondary institutions (Bourdieu, 1977; McDonough, 1997). Perna's conceptual model (2006) incorporates the influence of demographic characteristics, as well as social and cultural capital (L. Perna, 2006). Demographic characteristics consist of gender, race/ethnicity, and socioeconomic status, all of which are pertinent to this study. Two additional constructs included in layer one are supply of resources and expected costs.

### **Layer Two**

School and community context is the second layer which recognizes ways in which social structures and resources assist or thwart students during the college choice process. Past research has found that many students do not have the opportunity to attend high schools that have the necessary resources to successfully pursue college options (Engberg & Wolniak, 2010), which stresses the need to further

investigate how the school and community context can influence the college choice process of Latina/o students. Latina/o students are more likely to attend public high schools in urban areas that are racially segregated, have poorly maintained facilities, and have high rates of undertrained and under-credentialed teachers (Aguirre & Martinez, 1993). This decreases students' chances of acquiring an education that will adequately prepare them for college, especially selective institutions. Many other students are overrepresented in several at-risk academic areas such as: having a C average GPA, low test scores, frequently changing schools, and/or being held back (Swail, Cabrera, & Lee, 2004). This often results in lower levels of college preparedness for Latina/o students and to an extent helps to explain the underrepresentation of Latina/o students in selective four-year institutions. Therefore, the purpose of this study is to further explore how a high school's location and type (i.e., private vs. public), influences Latina/o students' college choice process and decision to enroll in college.

### **Layer Three**

The third layer of Perna's conceptual model emphasizes the influence postsecondary institutions have on the decision by students to attend college (L. Perna, 2006). For example, postsecondary institutions often provide students and their parents with information that may influence their decision to attend a specific institution. In particular, institutional characteristics, such as school rankings, programs of study, enrollment size, and campus location, can determine whether or not parents or students are interested in obtaining more information about certain institutions. This information will allow students and parents to determine whether their goals and values are in alignment with the particular institution (L. Perna, 2006). This study will focus on those

specific characteristics Latina/o students are more likely to report as important in their college choice process and in their decision to enroll in college.

#### **Layer Four**

The final layer, the socio economic and policy context, looks at how social forces (e.g., demographic changes), economic conditions (e.g., unemployment rate) and public policies (e.g., establishment of a new need-based grant programs) influence students' college choice process. Earlier models often failed to address how policy implications, both at the secondary and postsecondary levels, shaped students' college choice process and which institutions students were able to consider based on these implications (L. Perna, 2006). Unfortunately, the specific dimensions presented in this layer are beyond the scope of the current study, as well as the dataset utilized.

Therefore, this study will not include the fourth layer of Perna's conceptual model. While Perna does separate her model into four specific layers, each layer indirectly and directly influences the context of the other layers. Although this study only considers three of the four layers suggested by Perna's model, and incorporates additional factors, it is still important to look at the variety of influences this model acknowledges in students' college choice process. Despite the fact that this model has not been tested or refined in a large number of studies (Bergerson, 2009), it is still one of the most relevant models used for the purpose of this study.

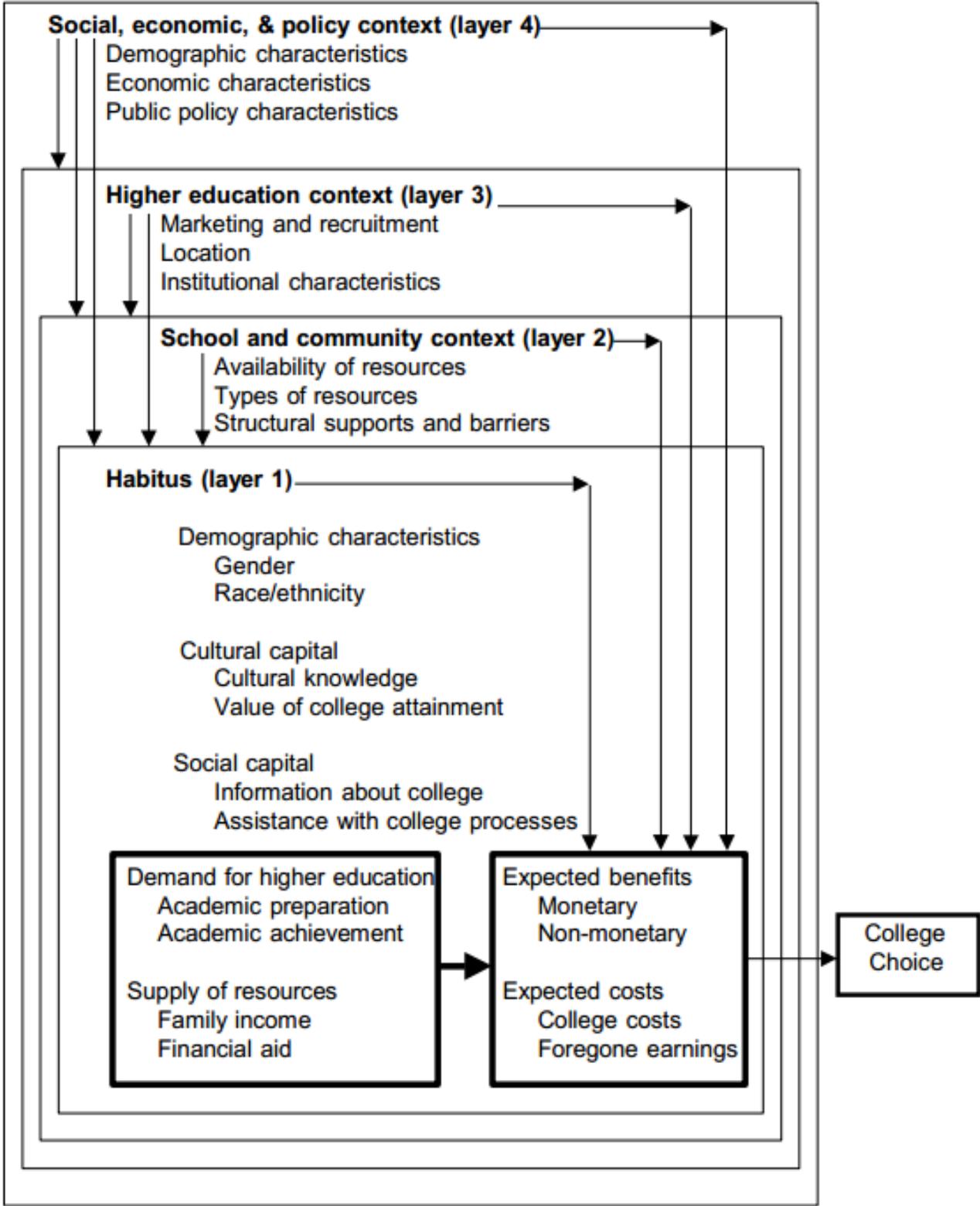


Figure 2-1. Perna’s proposed conceptual model of college choice. Source: Springer by Copyright Clearance Center

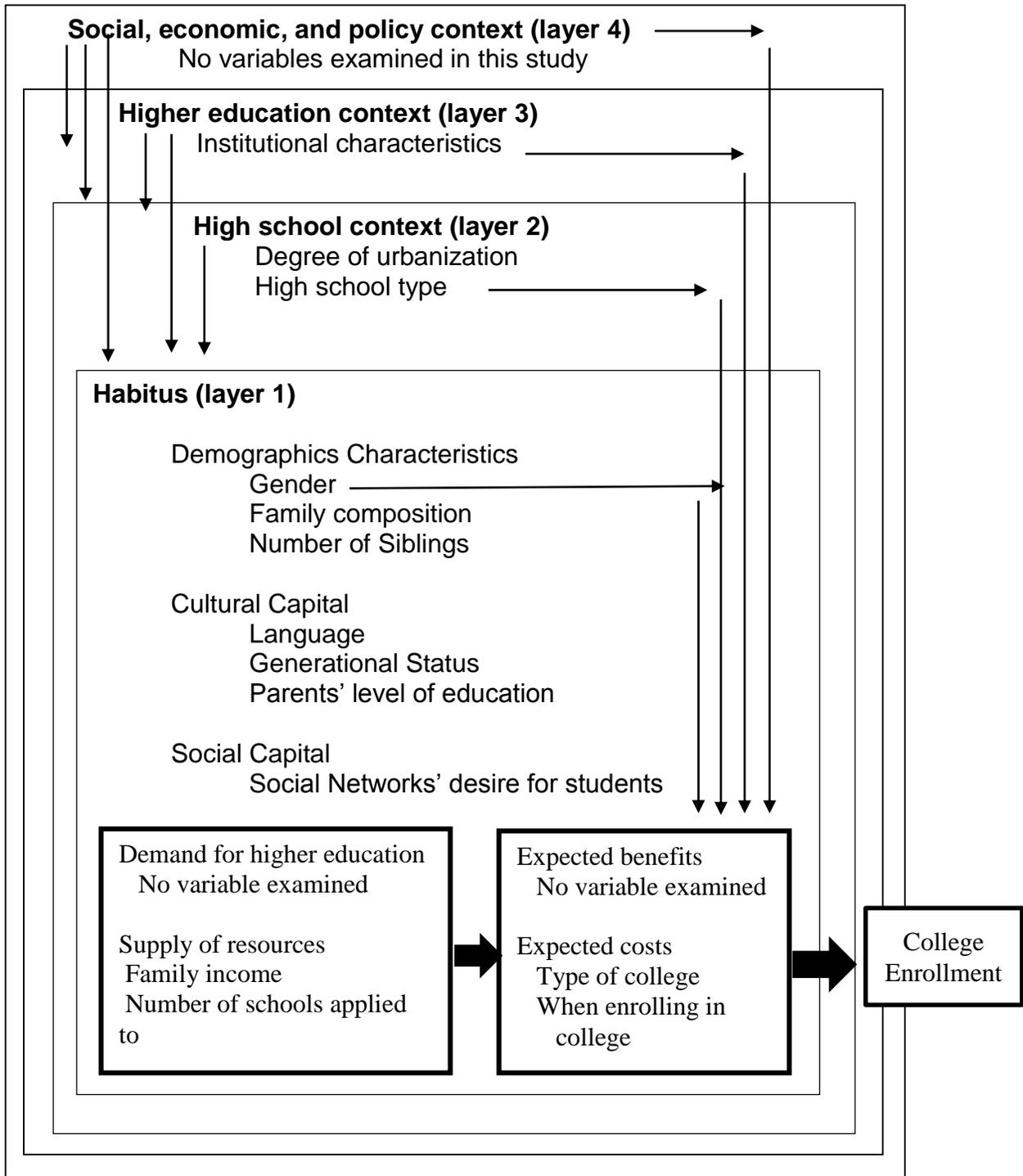


Figure 2-2. Perna's (2006) modified conceptual model

## **College Choice Process of Latina/o Students**

This literature review examines the college choice process of Latina/o students in light of two contradicting trends. For one, there has been a rapid increase in the college enrollment rates of Latina/o students. However, they continue to be one of the least college-educated groups in terms of bachelor degree recipients. Since Latina/o students are more likely to be first-generation college students compared to other racial/ethnic groups (Santiago, 2007), this literature review also includes research on first-generation students. The college choice process of Latina/o students will be further examined using Hossler and Gallagher's (1987) three stage model of college choice, one of the two theoretical frameworks used for this study.

### **Predisposition**

Studies that focus on the predisposition stage look at the formation of educational aspirations and intentions (A.F. Cabrera & La Nasa, 2000a). The underlying theme in the literature focuses on how Latina/o students' experience the predisposition stage. Several studies highlight the importance of parents in the formation of college aspirations for Latina/o students. But in general, parents play a key role in the predisposition stage of all racial and ethnic groups (Hamrick & Stage, 2004; Rooney, 2008; Hossler et al., 1999; Hossler & Stage, 1992). In Hamrick and Stage's (2004) study, the researchers found parents' expectations to be a strong indicator of Latina/o students' predisposition process. Additionally, Hao and Bonstead-Bruns (1998), studied eighth graders and found that higher levels of parent-student interactions in learning activities, involvement in their children's learning at home, and involvement in extracurricular activities, led to an increased number of school years those eighth graders were expected to complete.

Moreover, Azmitia et al. (1994) contrasted the educational aspirations Mexican American parents had for their children against educational aspirations of White parents. They found that Mexican American parents held higher educational aspirations for their children, and many wanted their children to continue their education beyond high school. Schaller, Rocha, and Barshinger's (2007) study suggested that low-educated Latina/o parents who were involved in their child's education enhanced the child's educational development. Similarly, Plunkett and Bámaca-Gómez (2003) found that parental monitoring, support, and help with schoolwork were associated with Latina/o students' increased academic motivation and higher educational aspirations. But despite the high expectations many Latina/o parents have for their children, they continue to lack the information (i.e., financial aid or college application procedures) their children need to maintain and realize college aspirations.

Since a large percentage of Latina/os are first-generation college students (Torres & Hernandez, 2009), many are in need of additional information and socialization to help them get into college (McDonough, 2004). This need arises from the large concentration of Latina/o parents who are not college educated or familiar with the American educational system, thereby rendering them incapable of passing on the necessary information their child needs to enroll in college and to be successful in their educational endeavors (Gloria & Segura-Herrera, 2004). Nonetheless, social support for many Latina/o students comes from other family members such as, siblings, cousins, and distance relatives. According to Gloria and Rodriguez (2000), familial support significantly impacts Latina/o students' educational experiences, particularly in reference to academic persistence. For example, many Latina/o students are influenced

by family members who have been through the educational pipeline and have helped them to acquire the necessary skills needed to survive college, along with providing academic support and guidance (Hurtado & Carter, 1997). Other studies have found that Latina/o students' academic motivation and success are greatly influenced by the amount of emotional support and encouragement they received from their parents (Hurtado et al., 1996).

Overall, the majority of the literature on Latina/os' college choice underscores the effect parents have on students' predisposition stage. In addition to parents, other family members, such as siblings, often play a significant role in the predisposition stage of Latina/o students. According to the literature, older siblings who have attended or graduated from college may play a critical role in the development of their younger siblings' college aspirations or intentions to attend college, by serving as role models, sharing information about college, and providing encouragement (M.T. Hurtado, 1997; Ceja, 2006). For example, in *Over the Ivory Tower*, Gandara (1995) interviewed fifty Mexican Americans who overcame various forms of disadvantages to reach the highest level of educational attainment: a Ph.D., M.D., or J.D. degree. Gandara found that many of these high achievers credited their older siblings with playing a significant role in transmitting college expectations. Despite many studies that recognized the important role of siblings in the decision to attend college, there is still much research left unexamined that will help us better understand the specific ways college-educated siblings influence the college aspirations of their siblings.

Another common factor found in the literature is the influence of SES on the predisposition stage of Latina/os (Hamrick & Sage, 2004; Kao & Tienda, 1998). Hamrick

and Stage (2004) explored the predisposition of students who attended predominantly minority and low-income schools. The authors found SES, as measured by parents' income and education, impacted African American and Latina/o students' predisposition but not that of White students; emphasizing the need to better understand the college choice process of different racial/ethnic groups. Butner et al. (2001) found differences in the "expectation and meaning of college for individuals from different socioeconomic groups" (Butner et al., 2001, p.31). The researchers suggested that "SES mediated....networks associated with college attendance" (Butner et al., 2001, pp.31-32). Other researchers who suggested similar arguments are Jun and Colyar (2002); they proposed a connection between social networks, cultural capital, and SES as a predictor of educational outcomes. The researchers argue that the social class standing of low-SES families hinders their ability to have well-developed social networks and cultural capital that promote higher education.

The literature has also found high schools to be influential in the formation of college aspirations (Ceja, 2001; Meredith, 2008). Regrettably for many Latina/o students, high schools often discourage student educational aspirations instead of promoting higher education. Researchers like Butner and associates (2001) have noted that minority women (i.e., Latinas and African Americans) often face lower expectations from high school counselors than males. To support similar claims, L.X. Perez (1999) highlights the fact that teachers and counselors can often form roadblocks for parents who try to support their children's college aspirations. A growing body of research indicates that high school counselors have tremendous influence on the college plans of Latina/o students. Unfortunately, these students are least likely to have counselors with

less training or those responsible for too many other, non-counseling-related tasks to give them good college guidance (McDonough, 2005; Plank & Jordan, 2001).

Nonetheless, first-generation students who receive academic support from their school counselor, as well as information about college programs, and assistance with the college admissions process are provided with the social capital that can compensate for family networks when students' parents have limited resources or education (Bryce, Moore-Thomas, Day-Vines, & Holcomb-McCoy, 2011). In this same study, using the ELS:02 data, Bryce, Moore-Thomas, Day-Vines, and Holcomb-McCoy (2011) found that “students who saw the school counselor for college information by 10<sup>th</sup> grade were more likely to apply to college compared with students who did not see the counselor for college information” (p. 194). Ironically, the researchers found that Hispanic students who did not go to their school counselor for college information were more likely to apply to two or more schools compared to Hispanic students who saw the counselor after 10<sup>th</sup> grade (Bryce, Moore-Thomas, Day-Vines, and Holcomb-McCoy, 2011, p.194).

Other researchers attribute Latina/o students' college aspirations to teachers who saw potential in them and encouraged them to attend college (Butner et al., 2001; Rooney, 2008). In recent years, teachers have received heightened attention in light of proposals to base their salary and promotion on measures of teacher quality and student performance (Loeb, Rouse, & Shorris, 2007; Kyriakides, 2005). Ginorio and Huston (2001) found teacher's support, as defined by teachers who listen to, encourage, and respect students, related to the academic achievement of Latina/o students. Thus, the role of teachers and counselors could be further studied in order to

understand the role they play in the predisposition stage of Latina/o students. Another area of study could include high school coaches, where a dearth of research exists.

In addition to school factors, researchers have started to examine how social and cultural capital affect Latina/o students in the predisposition stage. Some studies focused on the social relationships from which a student could potentially receive various types of resources and support (Ceja, 2001; Cohen, 2009; Stanton-Salazar & Dornbusch, 1995). Stanton-Salazar and Dornbusch's (1995) study looked at the aspiration of Mexican American high school students and found a connection between levels of social capital and school-based ties. In particular, Stanton-Salazar and Dornbusch (1995) found that students with higher educational aspirations also had higher levels of social capital. For example, these students had more high-status contact with adults who had access to college-related information and support from teachers, counselors, and other school personnel among the networks of people they knew who could provide college-related informational support. Thus, many students may develop college aspirations sooner, if this is transmitted as an expected behavior from the students' social networks. Perez and McDonough (2008) noted that social networks have the potential to positively or negatively affect students' college aspirations because they are comprised of "individuals who can either swing open or close shut the college-going doors for Latina/o students" (p.260).

P.A. Perez and McDonough's (2008) research has expanded our understanding of how social networks, such as parents, siblings, peers, and high school personnel act as influential resources during the college choice process of Latina/o students. More specifically, Perez and McDonough (2008) have reported peers to have both positive

and negative effects on Latina/o students' college aspirations. However, other studies have provided conflicting findings regarding the impact peers have on Latina/o students' college aspirations (Contreras-Godfrey, 2009; Gomez, 2005). In their examination of the influence of peers on 6<sup>th</sup> and 7<sup>th</sup> graders in a community college academic outreach program, Azmitia and Cooper (2001) found peers represented a challenge to college aspirations. Similarly, Gomez (2005) found peers negatively impact the college aspirations of Latina/os who did not plan to attend college. Conversely, Perez's (2007) study found that students were often encouraged by their friends to attend college. Contreras-Godfrey's (2009) study concurred with Perez's finding and found peers have a positive influence on some Latina/o students' decisions to attend college.

As proven by various studies, peers matter in the predisposition stage of Latina/o students, but whether they positively or negatively influence the values and behaviors of Latina/o students to attend college varies. The literature suggests that peers have a positive influence on college aspirations and attendance, but usually when students are part of a strong peer group who mutually support each other's college aspirations (Contrera-Godfrey, 2009; DiMaggio & Mohr, 1985; Gomez, 2005). To an extent, cultural capital makes it possible for students to have access to such peer group participation with those who value higher education and frequently engage in conversations that include plans to further one's education (DiMaggio & Mohr, 1985).

Another significant factor that influences Latina/o students' predisposition stage is cultural capital. Cultural capital refers to the values, knowledge, skills, and abilities (Tierney & Hagedorn, 2002) which play a role in students' predisposition stage. Unfortunately, many low-income Latina/o students lack the cultural capital of middle and

upper class students, often resulting in lower educational aspirations and college preparation rates (Jun & Coylar, 2002). Tierney (1999) supports this claim with an examination of a college preparation program that used several strategies to enhance students' cultural capital. The program did this by stressing to low-income students that "high school is not enough" (p.88). The program attempted to instill a form of cultural capital that low-income students often lack in comparison to middle and upper class students who are regularly told by their families and friends to further their education.

Overall, the underlying principle of this research is to acknowledge that Latina/o students experience the college choice process differently from other racial/ethnic groups, a fact which requires further investigation. For example, Latina/o parents' lack of information about financial aid or college application procedures makes it difficult for them to help their children fulfill their college aspirations (Azmitia et al., 1994; L.X. Perez, 1999). In addition, Latina/o students' placement in non-college bound classes often hinders their college aspirations (Gonzalez et al., 2003; P.A. Perez, 2007) while other students' college aspirations are negatively influenced by peers who do not plan to continue their education beyond high school (Azmitia & Cooper, 2001; Gomez, 2005). Further, Latina/o students' social networks, or lack thereof, can also have a negative influence on their college aspirations especially, when it includes individuals who limit students' access to college information or resources (Butner et al., 2001; P.A. Perez & McDonough, 2008). Nevertheless, many Latina/o students develop and maintain their college aspirations which they carry on to the search stage.

## **Search**

The second stage of the college choice process looks at where Latina/o students gather information about college and whether they talk to parents, peers, school

counselors, teachers, coaches, relatives, and/or college admission recruiters as they consider which college they plan to attend (Hossler et al., 1999). This section addresses three parts: students' access to information about college, their level of knowledge of the financial aid process, and their perceptions about being able to pay for college, all of which are greatly influenced by the type of social and cultural capital students have access to. In general, Latina/o students are usually uninformed or misinformed about college and financial aid (Admon, 2006; Kao & Tienda, 1998). Many first-generation Latina/o students do not possess the social and cultural capital necessary to obtain facts about college and financial aid. Whereas, most students may rely on teachers, guidance counselors, and college admission personnel, as was found in a nine-year study of high school students (Hossler et al., 1999), Latina/os may seek other sources (Admon, 2006; P.A. Perez, 2007), such as help from relatives or friends who may have some knowledge about college.

A possible explanation about why Latina/o students are less likely to rely on school counselors for college information may have to do with the large school-to-counselor ratios at many high schools where there is a high Latina/o enrollment rate. Hence, counselors may not be readily accessible for one-on-one counseling sessions with students. According to the American School Counselor Association (n.d.), in the four states where Latina/o students make up the largest share of the population (New Mexico, Texas, California, and Arizona), the recommended student-to-counselor ratio of 250-to-1 was exceeded by more than half, with Arizona having the highest student-to-counselor ratio of 815-to-1. Although school counselors are often reported to play a significant role in influencing students' college enrollment, this may not be the case for

many Latina/o students. According to Ceja (2001) and Cohen (2009), many Latina/o students are seriously underserved by their counselors when it comes to obtaining college information or pursuing a college education. Other studies have found that counselors often track Latina/o students into vocational paths as opposed to college-bound tracks, which may deter some students from pursuing a college degree through their discouraging words or behavior which mirrors low expectations (Vela-Gude et al., 2009). The negative relationships that generations of Latina/o students have encountered may help to explain why many Latina/o students' continue to hesitate to seek college information from guidance counselors (Vela-Gude et al., 2009).

Latina/o students' knowledge of financial aid and their perceptions of their ability to afford college also influence the type of school a student is willing to consider and learn more about (A.F. Cabrera & La Nasa, 2000a). Unfortunately, most Latina/o students and parents know less about the financial aid process and the cost of college than other racial/ethnic groups (Kao & Tienda, 1998). This lack of information Latina/o students and parents have about college cost and financial aid options often results in a distorted perception of their ability to afford college (L.X. Perez, 1999), in particular four-year institutions. "Students who attend community colleges, typically the lowest-cost institutions, work more and borrow less than students at other institutions" (Burdman, 2005, p.5). According to Berkner et al. (2005), only 12 percent of community college students take out student loans versus 40 percent of students at other institutions. For many low-income and first-generation students, debt aversion frequently begins with parents and their reluctance to borrow as a result of their own negative experiences with

past indebtedness, their leerness about giving out financial information, or their limited experience with credit (Burdman, 2005).

In her study, Burdman (2005) found that among full-time students, first-generation students were twice as likely as those students whose parents had college degrees to work full-time instead of borrowing. Financial literacy may help in properly educating first-generation Latina/o families about borrowing student loans. While most high school students tend to rely on their high school counselors for financial aid information, many school counselors report that they do not feel comfortable with the intricacies of financial aid policies, especially loans (Burdman, 2005). Many other high school counselors are too busy serving hundreds of seniors at understaffed schools and find little time to address the issue (i.e., financial aid process or literacy) while many others do not have the proper training to do so (Burdman, 2005).

In closing, the literature suggests Latina/o students' experience the search stage differently from other students, with many first-generation Latina/o students lacking information about the financial aid process and the cost of college (Admon, 2006; Gomez, 2005). Nonetheless, many Latina/o students successfully navigate through the search stage of the college choice process. However, who exactly Latina/o students go to for college information is important to examine in order to better understand how they navigate the search stage. Researchers have suggested that Latina/o students often sought parents, close family members, counselors, teachers, and peers for guidance (Stanto-Salazar, 2004; L. Perna, 2006). However, who they're more likely to seek for college information is still left unexamined. Therefore, further research is recommended

to look into the role parents, close relatives, counselors, favorite teachers, and peers have on Latina/o students' search stage, as well as their choice of college.

## **Choice**

The final stage is the choice stage, which consists of the ability of students to make decisions about where to apply and enroll in college (A.F. Cabrera & La Nasa, 2000a; Hossler & Gallagher, 1987). This section reviews the research that is related to the choice phase of Latina/o students' college choice process, with an emphasis on how parental factors, cost of tuition, financial aid, distance to home, familial obligations, and academic preparation influence Latina/o students' decision to select a college.

A commonly referenced factor that is said to impact Latina/o students' choice stage is the parental factor. However, this factor also includes parents' income, education, and level of involvement with their students (M.T Hurtado, 1997; S. Hurtado et al., 1997; Rooney, 2008). In their students' college application behavior study, S. Hurtado et al. (1997), noted that students' SES (as measured by parents' income, educational attainment, and employment status) was highly associated with the type of institutions students considered a potential college choice. In particular, the authors found that parents' income influenced the number of college applications students' submitted but their educational levels were found to have no significant influence. Similar studies found that SES is an indicator of college enrollment for Latina/o students (M.T. Hurtado, 1997; L. Perna, 2000). More specifically, M.T. Hurtado's (1997) study found that students are more likely to apply to more colleges if they came from households with high incomes or if their mothers were well educated. Thus, parents' gender may matter when it comes to influencing Latina/o students' college choice stage. In their overview of research on racial, ethnic, and immigration differences in

educational achievement and attainment, Kao and Thompson (2003) argued that parental income and education “is the best predictor of eventual academic outcomes” (p.431). The researchers noted that low-income Latina/os are disproportionately represented in community colleges suggesting that Latina/o students are more likely to select community colleges as a result of being low-income and not necessarily due to personal preferences.

Additionally, parental involvement and expectations significantly influence the college choice stage of Latina/o students. In Perna and Titus’ (2005) study, they found parental involvement related to college enrollment but it varied by race/ethnicity. The authors used the National Educational Longitudinal Study (NELS) and operationalized parental involvement employing two indicators: parent-student involvement and parental monitoring. Overall, the odds for any student to enroll in college increased with the frequency with which parents discussed educational-related topics, volunteered at the school, and contacted the school about academics. Therefore, higher frequencies of certain types of parental involvement encouraged students’ enrollment in four-year institutions. The researchers’ conceptualized parental involvement “as a form of social capital that provides individuals with access to resources that may facilitate college enrollment” (Perna & Titus, 2005, p.487) and suggested that different types of parental involvement may be explained by parents “habitus, or view of acceptable types of parental involvement” (p.509). Swail et al. (2005c) found that Latina/o parents’ high educational expectations for their children manifested in a significant effect on the students’ probability of completing a bachelor’s degree.

Furthermore, conventional examples of parental involvement are inadequate in describing the ways that Latina/o parents are involved in their children's schooling (Lopez, 2001; Kiyama, 2008). According to Lopez (2001), Latina/o parents may expose their children to manual labor in order for them to witness the consequences of not having a college degree. This is intended to teach the value of education. In addition, older siblings assist younger siblings with homework assignments (Kiyama, 2008). Lopez noted that if these behaviors (parental involvement) were viewed from a traditional concept, Latina/o parents may then appear uninvolved in their children's education. Instead, Lopez describes Latina/o parents who were involved in their children's education, outside of traditional models, as having a positive impact on the children's academic performance in either high school or college.

Other factors supported by the literature include the cost of tuition and financial aid (Carreras, 1998; Ceja, 2001). While students in general may overestimate the cost of college (Kirst & Venezia, 2004), financially disadvantaged students may be more likely to overestimate the costs of college attendance (Grotsky & Jones, 2007; L.X. Perez, 1999). In particular, Kirst and Venezia (2004) found that low-income students were four to six times more likely to overestimate the cost of tuition. In their study, Ganderton and Santos (1995) found that increasing the capacity of Latina/o families to finance college increased the probability that more Latina/o students would enroll in college. Similarly, Arbona and Nora's (2007) findings support the research of Ganderton and Santos and suggested that in order to increase persistence and college graduation, more efforts should be made to increase financial aid for Latina/o students. Kurlaender (2006) found that limited financial resources may be one reason Latina/os select

community colleges over four-year institutions, especially since many are financially disadvantaged and thus, seek lower tuition costs. In Carreras' (1998) study, financial aid had the second largest influence on Latina/o students' college application decisions. Similarly, Rooney's (2008) study looked at those factors that influence college enrollment and found that first-generation Latina/o students tended to enroll in the college where they received the best financial aid package. Thomas' (2008) study also examined the factors that influenced both Black and Latina/o students' decisions to attend college, and financial aid was found to have a significant influence on their decision to enroll in college.

Geographic location is another important factor in the college choice stage process of Latina/o students. According to Rooney's (2008) study, the four-year colleges that first-generation students are more likely to attend are based primarily on cost of attendance and distance from home. In this study, gender differences arose, with Latinas being more likely to attend a college closer to home whereas Latino males were more likely to go off to college. P.A. Perez's (2007) findings support Rooney's study of gender differences in regards to geographic location on college choice, with Latinas mentioning proximity to home more often than Latino males as a very important factor towards their college choice stage. Latina/o students' emphasis on keeping close proximity to home may explain why many choose community colleges over four-year institutions (Kurlaender, 2006).

Many other Latina/o students may choose to attend community colleges due to family obligations and not necessarily because of the cost of college (Ceja, 2001). Parental expectations may be another reason many Latina/o students decided to attend

a college with close proximity to their homes (Lopez-Turley, 2006). In her study, Lopez-Turley looked at two types of preferences parents held for their children's college education: college-at-home or college-anywhere. Lopez-Turley found that Latina/o parents are more likely to be college-at-home parents. Parents' lack of familiarity with students' going off to college or lack of knowledge about the benefits of four-year institutions over two-year institutions may be another reason why Latina/o parents are more hesitant to allow their children to go off to college.

Finally, Latina/o students' academic preparation and ability influence their application and enrollment behavior decisions (L. Perna, 2000; Swail et al., 2005c). For example, Hurtado and associates (1997) found that Latina/o students in vocational programs submitted fewer college applications, and yet were more likely to apply to for-profit and community colleges in comparison to Latina/o students who were in rigorous academic programs. In Zarate and Gallimore's (2005) longitudinal study they found academic ability, as measured by standardized exams, to help predict Latina/o students' college enrollment rates. The study even found that students who were enrolled at four-year colleges exhibited higher academic ability in comparison to students who were not in college. For similar reasons, Kurlaender (2006) argued that weak academic preparation may be a reason some Latina/o students choose to attend community college. ELS:02 did not provide students' overall GPA or standard exams; therefore, academic preparation was left unmeasured due to the complexity of trying to measure for this factor.

As indicated by the literature, Latina/o students' experience the choice stage differently from other students. Researchers have found that parental education,

income, and involvement, along with college cost, financial aid, geographic location, family obligations, and academic preparation shape Latina/o students' decisions when choosing a college to attend. Although the literature suggests that some of these factors positively influence Latina/o students' choice stage, negative influences are also present. Nevertheless, many Latina/o students successfully complete the college choice process by enrolling in college. Where students decide to enroll and whether they enroll part-time or full-time are equally important to know because this helps to determine students' probability of earning a bachelor's degree.

### **Summary of Theoretical Frameworks**

This study incorporates elements from two college choice models: Hossler & Gallagher's (1987) three phase model for college choice and Perna's (2006) proposed conceptual model of studying college choice. The two models assist in the development of the literature review, as well as the structure of the research questions and aid in the analyses of the data. Hossler and Gallagher's model was primarily used because their model has framed much of the college choice research to date and because it simplifies the college choice process into three stages: predisposition, search, and choice (Hossler et al., 1999). In addition, this model looks at the college choice process from the student's perspective and takes into account how students' background characteristics affects their college choice process. However, like any other model, there is always criticism. For this model, it was the assumption that all students have equal access to college information and resources, failing to fully explain the experiences of all students, especially students of color, first-generation students, low-income students, and at-risk youth (Bergerson, 2009b; A.F. Cabrera & La Nasa, 2001; Talavera-Bustillos, 1998).

Perna's (2006) model acknowledges students' differences and how everyone does not have equitable access to the information and resources deemed necessary to successfully navigate the college choice process (Bergerson, 2009b). Perna's (2006) model proposes four layered contexts which influence the college choice process. However, for this study only three of the four layers of the model will be incorporated; individual's habitus, school context, and higher education context. In particular, the social and cultural capital variables from the habitus layer, the school context from the school and community layer of the model, and the institutional characteristics of the higher education context were the most applicable to use in this study.

In conclusion, Hossler and Gallagher's (1987) model was the primary theoretical framework used for this study with inclusion of some elements from Perna's (2006) model. As previously mentioned, only those contextual layers from Perna's (2006) model that are identified in the literature as relevant to Latina/o students' college choice process and that were made available in ELS:02 were used for this study. By implementing various variables from Perna's model, this study explored the familial, social, educational, and personal variables that impact the college choice process of Latina/o students.

## CHAPTER 3 METHODOLOGY

The purpose of this section is to describe the research methodology utilized in this study to investigate the role social networks have on the college choice process of Latina/o students. Chapter 3 revisits the purpose and research questions guiding this study. The following section describes the source and sample. The dependent and independent variables are further described, along with the statistical methods used to analyze the variables. Additional methodological considerations that have important implications for the research design of the study and data analysis are further explored. Chapter 3 ends by addressing the limitations of this study.

The purpose of this study was to examine the influence social networks have on Latina/o students' college choice process. Particular attention was given to how the expectations of social networks, as determined by the student, influenced the students' predisposition, search, and choice stage, along with their decision to enroll in college. More specifically, each student was asked what they think their mother, father, friend, close relative, school counselor, favorite teacher, and coach desired for them to do after high school. Students were asked this question twice, once as sophomores and the second time as seniors. For the purpose of this study, it is fundamental to keep in mind that these desires or expectations are based on the verbal or nonverbal messages students received from the following social networks listed above.

Moreover, there were four research questions guiding this study: how the expectations that social networks have for Latina/o students influence their college aspirations; how the expectations social networks have for Latina/o students influence who students go to for college information; how the expectations social networks have

for Latina/o students influence the main reason students selected a particular college; and finally, how the expectations social networks have for Latina/o students influenced students decision to enroll in college after high school.

### **Proposed Hypotheses**

Based upon the research questions guiding this study and the literature on Latina/o students' college choice process, the following hypotheses are proposed:

- Does the expectations social networks have for Latina/o high school students, along with other key variables, influence students' degree aspirations?
- Does the expectations social networks have for Latina/o high school students, along with other key variables, influence who their more likely to go to for college entrance information in both the 10<sup>th</sup> and 12<sup>th</sup> grade?
- Does the expectations social networks have for Latina/o high school students, along with other key variables, influence the primary reason students selected their chosen college?
- Does the expectations social networks have for Latina/o high school students, along with other key variables, influence their decision to enroll in college?

### **Data Source**

The data analyzed for this study comes from the National Center for Educational Statistics (NCES), Educational Longitudinal Study of 2002 (ELS:02). When this study was conducted, ELS:02 offered the most robust and recent national-level data relevant to Latina/o students' entire college choice process. Starting with the National Longitudinal Study of the High School Class of 1972 (NLS:72), the NCES began longitudinal data that linked the educational experiences of high school students with later outcomes such as workforce experiences and collegiate experiences. The intention of these studies was to gather information on potential factors, such as family, cultural, economic, and social, that may influence the development of students at different stages. ELS:02 provided longitudinal data for participants in three waves: the

base year consisted of students' sophomore year in 2002, the first follow up was in 2004 (students' senior year), and the second follow up was in 2006 (students in postsecondary school or the workforce). The survey was administered to students, parents, teachers, and administrators (principal and library media center director) at the student's respective high school. However, for the purpose of this study only Latina/o students were of interest. The intention of ELS:02 was to monitor the transition of a national sample of high school students as they progress from tenth grade through high school and on to college and/or the workforce and the social factors that influence them.

I selected the ELS:02 dataset as the data source because it focused on the college choice process of Latina/o students from students' perspectives and investigated the influences social networks have on the three phases of students' college choice process: predisposition, search, and choice. ELS:02 also utilized a nationally representative sample allowing for the study to address the research questions in a timely and cost effective manner. Tenth grade students attending different types of high schools were included for ELS:02. These high schools included public, private, and Catholic schools within the 50 states, along with the District of Columbia. Of the 1,268 sampled schools, 1,221 were eligible but only 752 of these schools responded with a 67.8% response rate. The majority of schools were public high schools (88%) located in urban cities (53%). The targeted population includes 10<sup>th</sup> grade students who attended study-eligible schools in 2002 spring term. Therefore, 752 sample schools across the United States gave permission for the administration of ELS:02, with 16,197 students participating among all these schools.

## Sampling Design

The majority of national datasets use a complex survey design in order to employ multistage, cluster, and/or stratified sampling strategies (Hahs-Vaughn, 2007). Small scale empirical research studies typically use simple random sampling to ensure each subject in the population has an equal chance of being included in the sample. Complex sampling designs, used by most national datasets, usually oversample subjects and institutions of interest therefore, they will have a higher probability of selection.

Oversampling ensures subjects and institutions of interest are included in the sample with sufficient numbers for the purposes of statistical analysis (Thomas & Heck, 2001). For example, non-public schools, specifically Catholic and other private schools, were sampled at a much higher rate than public schools in order to ensure the sample was large enough to support comparisons between schools. Asian and Hispanic students were also sampled at a much higher rate than White and Black students in order to ensure a large enough sample for comparison among these groups. A stratified systematic sample was used to select students on a flow base as student lists were received, the strata included Hispanic, Asian, Black, and other race/ethnicity.

The sample for ELS:02 was established using a two-stage sampling design (Wei et al., 2009). The first stage identified the institutions that would be included in the sample from approximately 752 eligible United States high schools. The institutional sampling frame was constructed with the intention to match the targeted population. The second stage of the sampling design consisted of selecting students from those 752 institutions with approximately 26 students per school being selected from these lists. Sample instructions provided students enrollment lists that were used to construct the sampling frame. Approximately, 16,197 students participated in the ELS:02 base

year. Further information about the sampling design is available in the ELS:02 base year data file user's manual.

### **Data Sample**

For the purpose of this study only Latina/o students who identified as Hispanic and were enrolled as tenth grade students at eligible schools during the 2001-2002 school year (n=2209) were included in this sample. For this study, it was determined that first-generation students would be defined as students who's neither mother nor father had earned a college degree (Ishitani, 2003). Additionally, I felt this was the clearest way to discern students who may have gained advantages from parents who had earned an associate's degree or higher. This sample was selected because I was interested in studying Latina/o students, and their within group differences (first-generation, socioeconomic status, social capital). Therefore, Latina/o students who did not classify as first-generation college students were not omitted from the sampling frame but rather used for comparison purposes with first-generation Latina/o students.

However, conducting statistical analyses using such a large number of cases poses great risk for committing Type I errors (Thomas & Heck, 2001). Using a normalized or relative weight when analyzing large, secondary datasets is a common practice among researchers and helps correct for oversampling in the survey design (Hahs-Vaughn, 2005; Thomas & Heck, 2001). The normalized weight reduces the overall sample size for statistical purposes, but still preserves the appropriate proportions of the complex survey design. In this study, a normalized weight will be used to conduct all statistical analysis.

## Descriptive Statistics

The following tables provided descriptive information about the demographic variables of the sample of interest. As depicted in Table 3-1, there is a fairly equal representation of Hispanic male students (49.5%) enrolled in the 10<sup>th</sup> grade, during the 2001-2002 school year, in comparison to female students (50.7%). Another key demographic variable for this study was the estimated income level of Hispanic families during the year 2002. ELS:02 originally provided 13 different income groups but I recoded this variable to include only four different income groups based on the distribution of frequencies. The largest group (51%) indicated that the total family-income during 2002 was less than \$35,000. The last two groups represented slightly higher income groups with 14.5% indicating a total family income between \$50,001 and \$75,000 and 15.4% indicating a family income of \$75,001 or more. Income groups are reflected in Table 3-2 and display a trend which indicates that higher income groups have fewer first-generation students.

Table 3-1. Frequency of gender (n=2209)

Gender		
	Frequency	Percentage
Male	1117	51%
Female	1092	49%

Table 3-2. Frequency of family income levels (n=2209)

Income range		
	Frequency	Percentage
Less than or equal to \$35,000	1128	51%
\$35,001-\$50,000	420	19%
\$50,001-\$75,000	320	14.5%
\$75,001 or Greater	341	15.4%

Table 3-3 displays further information about the family composition (BYFCOMP) of Latina/o students. ELS:02 originally provided nine categories representing different family compositions (BYFCOMP) but I recoded this variable to include only six

categories: both parents (reference), one parent and one guardian or two guardians, mother only, father only, only one guardian, and parent or guardian lives with student less than half the time. The majority of Hispanic students (54.91%) lived with both their parents, followed by 20.14% who lived with at least one parent and guardian or with two guardians, and less than 18.92% lived only with their mother. Further information about Latina/o students' family structure is displayed on Table 3-4 which includes the number of siblings Latina/o students have. There was no differentiation between half-siblings or step-siblings. ELS:02 originally provided eight options for the number of siblings (BYSIBHOM) Latina/o students have but they were recoded to include only four categories. Most Latina/o students (47.62%) report to have one-to-two siblings, 16.11% had three-to-four siblings, a similar amount (13.12%) had no siblings, and the lowest percentage (2.9%) had five or more siblings.

Table 3-3. Frequency of family composition (n=2209)

Family Composition		
	Frequency	Percentage
Both parents	1213	54.91%
One parent + Guardian or Two Guardians	445	20.14%
Mother only	418	18.92%
Father only	71	3.2%
One Guardian	38	1.7%
Parent/Guardian lives with student less than half the time	24	1.1%

Table 3-4. Frequency of number of in-home siblings (n=2209)

Number of in-home siblings		
	Frequency	Percentage
Zero	290	13.12%
One-Two	1052	47.62%
Three-Four	356	16.11%
Five or more	66	2.9%

Table 3-5 displays additional information on students' native language. ELS:02 originally provided six possible native languages: English, Spanish, other European language, West/South Asian language, Pacific Asian/Southeast Asian language, or

other language. However, I recoded this variable (BYHOMLNG) to include only the top three most common native languages spoken by Latina/o students: English, Spanish, and other. The majority of their native language was English (47.12%), followed by Spanish (46%), and the smallest percentage (2.35%) consisted of another language.

Table 3-6 displays information about Latina/o parents' English fluency. ELS:02 provided five possible categories that parents may fall under: not fluent English speakers, partially fluent, fluent, non-native English speaker (fluency unknown), or native English speaker. Paradoxically, the majority of Latina/o parents (37.12%) were native English-speakers. The second largest group consisted of parents (27.79%) who were not fluent in English. The third highest group (16.65%) reported to be fluent English speakers. According to these descriptive statistics, over half (53.77%) of all Latina/o parents reported to speak English fluently, whether they were native English speakers or not.

Table 3-5. Frequency of students' native language (n=2209)

Students' Native Language		
	Frequency	Percentage
English	1041	47.12%
Spanish	1017	46%
Other	52	2.35%

Table 3-6. Frequency of parents English fluency (n=2209)

Parents' English Fluency		
	Frequency	Percentage
Fluency unknown	44	1.99%
Not fluent	614	27.79%
Partially fluent	50	2.23%
Fluent	368	16.65%
Native English Speaker	820	37.12%

Table 3-7 provides information about the generational status of Latina/o students. ELS:02 variable (BYGNSTAT) includes three categories that describe Latina/o students' generational status: (1) newly immigrates (i.e. the sample member was born in Puerto Rico or a non-US country, regardless of their mother's birthplace); (2) first generation

(i.e. the sample member was born in the United States, but his/her mother was born in Puerto Rico or a non-US country); or, (3) second or more generations (i.e., both the sample member and their mother were born in the US). The majority (35.8%) of Latina/o students reported to be second generation, 26.7% consisted of students that reported to be first-generation, and only 22.4% reported to be newly immigrants.

Table 3-7. Frequency of students' generational status (n=2209)

Generational Status		
	Frequency	Percentage
Newly immigrated	495	22.40%
First Generation	590	26.7%
Second Generation	791	35.8%

Table 3-8 displays the different types of high schools the sample population attended. The majority of students were enrolled in public schools (85.4%), followed by private schools (11%), and a smaller percentage of Latina/o students were enrolled in private Catholic schools (3.5%). The urbanicity of schools' locale is reflected on Table 3-9. The majority of Latina/o students attended schools in urban cities (47%), followed by suburban cities (44.3%), and the smallest percent reside in rural areas (8.6%).

Table 3-8. Frequency of type of school (n=2209)

Type of School		
	Frequency	Percentage
Catholic	244	11%
Other private	78	3.5%
Public	1887	85.4%

Table 3-9. Frequency of school urbanicity (n=2209)

Location		
	Frequency	Percentage
Rural	190	8.6%
Suburban	979	44.3%
Urban	1040	47%

Table 3-10 displays information about the educational attainment of Latina/o parents. ELS:02 originally provided 8 different educational levels: did not finish high school, graduated from high school or GED, attended 2-year school with no degree,

graduated from two-year school, attended college but no four-year degree, graduated from college, completed Master’s degree or equivalent, completed Phd, MD, or other advanced degree. However, I recoded this variable (BYPARED) to included only five different educational levels, based on the distribution of frequencies. The largest group (42.6%) of Latina/o parents reported to have a high school diploma or less as the highest level of education obtained. The second largest group (21%) included parents who had obtained an associate’s degree. The smallest group (10.4%) consisted of Latina/o parents who held some type of advanced degree (i.e., Phd, MD, JD).

Table 3-10. Frequency of parent’s educational level (n=2209)

First-generation		
	Frequency	Percentage
Advanced Degree	230	10.4%
Bachelor’s	320	14.5%
Associate’s	465	21%
Some College, no degree	252	11.4%
High school diploma or less	942	42.6%

Additional information concerning whether students plan to continue their education right after high school or postpone it (Table 3-11). ELS:02 asked students, “Do you plan to continue your education right after high school or at some time in the future?” Students were provided with five possible choices to select from: yes, right after high school; yes, after being out of high school for 1 year; yes, after being out of high school over 1 year; yes, but don’t know when; and no, don’t plan to continue education. Over half of all Latina/o students (58.57%) said they plan to attend college immediately after high school. The second largest group (13.8%) consisted of students who plan to attend college one year after high school. Fewer students (2.1%) reported that they plan to attend college over one-year after being out of high school. Only 177 or 3.5% Latina/o students reported that they did not know when they planned to attend college and less than one percent (0.5%) reported that they didn’t plan to attend college at all.

Overall, the majority of Latina/o students (78.47%) planned to attend college sometime in the future. Table 3-11 illustrates that the longer students waited to attend college the smaller the percentage who anticipated attending college at all.

Table 3-11. Frequency of students' plans to attend college (n=2209)

Students' plans to attend college		
	Frequency	Percentage
After high school	1294	58.57%
One year later	305	13.8%
Over one-year later	47	2.1%
I don't know	177	3.5%
Don't plan to attend	12	0.5%

Table 3-12 displays information on the type of college Latina/o students' planned to attend. This variable was not recoded from its original categories: two-year colleges, four-year colleges, and vocational-technical-trade school. Over half (59%) of Latina/o students planned to attend vocational-technical-trade school, followed by (12.22%) who planned to attend a two-year institution, and the smallest percentage (5%) of Latina/o students planned to attend a four-year college/university.

Table 3-12. Frequency of type of college to attend (n=2209)

Type of College		
	Frequency	Percentage
Four-year college or university	112	5%
Two-year community college	270	12.22%
Vocational, Technical, or Trade school	1305	59%

Table 3-13 obtains information on the number of colleges Latina/o students applied to. This variable was not recoded and the original 11 variables remain the same. However, for demonstration purposes Table 3-13 includes a summary of the variables. The majority (22.67%) of students applied to at least one school, 15.75% of Latina/o students applied to two schools, and 9.14% of students applied to three schools. Less than 20% of students applied to more than four schools.

Table 3-13. Frequency of schools applied to (n=2209)

	Schools applied to	
	Frequency	Percentage
One	501	22.67%
Two	348	15.75%
Three	202	9.14%
Four	106	4.79%
More than five	189	8.5%

Since I am only interested in Latina/o students, students who are not Latina/os are omitted from the study's final sample. This reduced the sample from over 16,000 to approximately 2,209 students. Nonetheless, this is still an adequate sample size that consists of a national database which can be generalized to Latina/o students across the country. According to the descriptive statistics, 42.6% of Latina/os in this sample fell under the category of first-generation college student. Contrary to the literature, there were more Latina/o students who had college educated parents (57.4%). For the purpose of this study, it was determined that first-generation students would be defined as students who neither parent earned a college education which was similar to previous studies (Ishitani, 2003).

### **Dependent Variables**

The dependent variables used in this study to examine the college choice process of Latina/o students are: (a) Latina/o students aspiration to attend college or not, (b) who Latina/o students went to for college information, (c) the main reason they chose their given college, and (d) whether they enrolled in college or not. Table 3-14 provides a summary of these four dependent variables based on Hossler & Gallagher's (1987) college choice model.

Table 3-14. Summary of dependent variables

	ELS:02 Source Variable	Variable Type	Scale
College aspiration to attend college or not	BYS56	Ordinal /Categorical Multilevel analysis	Recoded: 1=high school or less, 2= Associate degree, 3= attended four-year, incomplete, 4= Bachelor's degree, 5=Advanced degree
Who 10 <sup>th</sup> grade students go to for information about the entrance requirements of various colleges	BYS59	Binary, Categorical Multilevel logistic regression	Recoded: 0=No, 1=Yes Recoded Categorical Option: (a) Guidance counselor, (b) favorite teacher/coach (c) parents, (d) siblings-other relatives, (e) friends, (f) college representatives, (g) library, (h) none of the above.
Who 12 <sup>th</sup> grade students go to for information about the entrance requirements of various colleges	F1S48	Binary, Categorical Multilevel logistic regression	Recoded: 0=No, 1=Yes Recoded Categorical Option: (a) Guidance counselor, (b) Teacher (d) parents, (e) Family, (g) friends, (h) College representatives, (k) Library, (n) none of the above.
Main reason students decided to attend their chosen college	F2B14	Multinomial/ Categorical	Categorical: (a) Program of study (b) reputation of school (c) cost (d) location (e) personal or family reasons (f) another reason.
Enrolled in college	F2B07	Dichotomous	Binary:0= No, 1= Yes

The first dependent variable focused on whether Latina/o students had aspirations to attend college. The variable BY56 asked students how far in school they think they will get and students answered with (a) less than high school graduation, (b) high school graduation or GED only, (c) attend or complete 2-year college/school, (d) attend college, 4-year degree incomplete, (e) graduate from college, (f) obtain master's degree or equivalent, (g) obtain PhD, MD, or other advanced degree. However, I recoded this variable into a multinomial categorical variable that divided the responses into five areas based on the type of degree students were most likely to aspire to (a) high school or less (b) associate's degree, (c) attend four-year but incomplete, (d)

bachelor's degree, and (e) advanced degree. This dependent variable was used to examine the factors associated with students' college aspirations. Table 3-15 provides frequencies for this variable. Approximately, third-fourths (74%) of Latina/o students in 10<sup>th</sup> grade aspired to some type of college education. However, the majority of Latina/o students (33.1%) aspired to obtain a bachelor's degree, followed by 29.7% who aspired for an advanced degree. The dependent variable was used to answer the first research question presented earlier in Chapter 3, concerning the college choice process of high school students.

Table 3-15. Frequency of students' college aspirations in 2002 (n =2209)

Students' college aspirations	Students' College Aspiration	
	Frequency	Percent
Aspire for high school or less	223	10.1%
Aspire for an Associate's degree	118	5.3%
Aspire for a Bachelor's degree, incomplete	125	5.6%
Aspire for a Bachelor's degree, complete	731	33.1%
Aspire for an Advanced degree	657	29.7%

The second dependent variable focused on the second stage of the college choice process and takes into account the influence of social networks and who students are more likely to seek for college information. The variable named F1S48 asked students where they have gone for information about the entrance requirements of various colleges. Students answers were binary (yes or no); (a) guidance counselor, (b) teacher, (c) coach , (d) parent, (e) brother or sister, (f) other relative, (g) friend, (h) college representatives, (i) a college's publication or website, (j) college search guides, publications, or website, (k) school library, (l) public library, (m) college or university library, (n) none of the above. However, I recoded this variable into seven binary options to reflect the interest of this study along with the support of the literature: (a) guidance

counselor, (b) teacher/coach (c) parent, (d) siblings/other relative, (e) friend, (f) college representatives, (g) library, (h) none of the above.

The student sample used to examine the second research question was delimited to only those high school students who reported that they intended to continue their education after high school by answering question FIS45; *Do you plan to continue your education at some time in the future?* Students who responded no or did not know skipped question F1S48. Therefore, only Latina/o students who answered yes to continuing their education sometime in the future answered question F1S48 (n= 1204). Table 3-16 provides descriptive information on the top three sources Latina/o students seek for college information. Approximately three-fourths (76.7%) of students went to their guidance counselor for college information. This was followed by teachers (56.9%) and college representatives (55.6%), both who shared very close numbers in terms of the most frequent sources 10<sup>th</sup> grade students went to for college information.

Table 3-16. Frequency of college search information (n= 1204)

Top three sources	College information	
	Frequency	Percent
Guidance Counselor	924	76.7%
Teacher	686	56.9%
College Representatives	670	55.6%

The third dependent variable focused on Latina/o students' choice stage based off of Hossler and Gallagher's college choice model. The variable F2B14 asked students which of the following categorical options is the main reason they decided to attend their chosen college: (a) program of study (b) reputation of school (c) cost (d) location (e) personal or family reasons (f) another reason. This variable was not recoded but for demonstration purposes Table 3-17 only provides information on the three main reasons students selected their primary institution. The majority of Latina/o

students (14.6%) selected location as the main reason why they choose their college, program of study was second (11.8%), and cost/affordability (10.7%) was ranked third. All three of these characteristics are supported by the literature as reasons to why Latina/o students selected the college they did, primarily community colleges. These type of institutions were chosen based on their close proximity to home and the low tuition cost in comparison to four-year institutions. Unfortunately, the type of institution students actually enrolled in was not included

Table 3-17. Frequency of college characteristics

Top three reasons	College Characteristics	
	Frequency	Percent
Location	324	14.6%
Program of Study	261	11.8%
Cost/affordability/financial reasons	238	10.7%

The final dependent variable focused on whether Latina/o students successfully navigated the college choice process and actually enrolled in college. Variable F2B07 was used because it asked students had they ever attended a postsecondary school after high school. The binary question was not recorded for research purposes. Table 3-18 provides information about the percentage of students who actually enrolled in college. Of all the Latina/o students in this sample, approximately 53% enrolled in some type of college following their high school graduation. Students were not asked what type of institution they enrolled in, such as public, private, four-year, vocational/trade, liberal arts, or community college. Moreover, Latina/o students who did not enrolled in college made up 30% of the overall sample population. Conversely, whether this sample of students eventually enrolled in college the following year(s) was not included. Accordingly to the literature (Horn et al., 2006), many Latina/o students delay college enrollment up in till their late twenties as opposed to enrolling in college immediately after high school. The most recent follow-up of ELS:02 may have this information

available unfortunately, due to time constraint I did not have sufficient time to access and analyze the most current follow-up of ELS:02

Table 3-18. Frequency of college enrollment (n=2209)

College Enrollment		
Enrolled in College	Frequency	Percent
Yes	1179	53%
No	668	30%

### Independent Variables

Perna's (2006) proposed conceptual model of college choice was used to select the independent variables included in this study. Using Perna's proposed conceptual model allowed me to organize the independent variables based on the layers of the model. Table 3-19 summarizes the independent variables used in this study.

Table 3-19. Summary of independent variables and indices

Items	ELS:02 Source Variable	Variable type	Scale
Gender	BYS14	Dichotomous dummy	0 = Male (reference), 1 = Female
Parents' highest level of education	BYPARED	Ordinal Categorical dummy	Recoded: 1 = High school diploma or less (reference), 2 = Some college but no degree, 3 = Associate's degree, 4 = Bachelor's degree, 5 = Advanced degree.
Family composition	BYFCOMP	Categorical dummy	Recoded: 1 = Both parents (reference), 2 = one parent & one guardian or two guardians, 3 = Mother only, 4 = Father only, 5 = One guardian only, 6 = Parent or Guardian lives with student less than half the time.
Number of in-home siblings	BYSIBHOM	Categorical dummy	Recoded: 1 = Zero (reference), 2 = One-two, 3 = Three-four, 4 = Five or more
Student's native language	BYHOMLN	Categorical dummy	Recoded: 0 = English (reference), 1 = Spanish, 2 = Other
Parent's English fluency	BYPLANG	Categorical dummy	1 = Not fluent (reference), 2 = Partially fluent, 3 = Fluent, 4 = Fluency unknown, 5 = Native English speaker
Generational Status	BYGNSTAT	Categorical dummy	Recoded: 0 = Not American born (reference), 1 = First-Generation, 2 = Second-Generation.

Table continued.

Items	ELS:02 Source Variable	Variable type	Scale
Family income	BYINCOME	Ordinal Categorical dummy	Recoded: 1 = \$35,000 or less (Low) (reference), 2 = \$35,001-\$50,000 (Middle), 3 = \$50,001-\$75,000 (Mid-high), 4 = \$75,001 or greater (High)
Do you plan to continue your education right after high school or at some time in the future?	BYS57	Categorical dummy	Recoded: 1 = Yes, after high school (reference); 2 = Yes, after one year; 3 = Yes, over one year; 4 = Yes, but I don't know when; 5 = No, I don't plan to continue my education.
What type of college student's plan to attend	BYS58	Categorical dummy	Recoded: 1= Four year college (reference), 2 = Two-year college, 3 = Vocational School
Social networks (Mother, Father, Friend, Close relatives, Guidance Counselor, Favorite Teacher- Coach) desire for 10 <sup>th</sup> student to do after high school	BYS66	Categorical dummy	Recoded: 1 = Attend college (reference), 2 = Get a job, 3 = Attend trade school, 4 = Join the military, 5 = Get marry, 6 = Whatever the student wants to do
Social networks (Mother, Father, Friend, Close relatives, Guidance Counselor, Favorite Teacher- Coach) desire for 12 <sup>th</sup> student to do after high school	F1S44	Categorical dummy	Recoded: 1 = Attend college (reference), 2 = Get a job, 3= Attend trade school, 4 = Join the military, 5 = Get marry, 6 = Whatever the student wants to do
Number of colleges applied to	F2BO3_P	Categorical Dummy	1 = One (reference), 2= two, 3 =three, 4 = four, 5 = five, 6 = six, 7 = seven, 8= eight, 9 = nine, 10 = ten, and 11= eleven or more.
High school urbanization	BYURBAN	Categorical dummy	0 = Urban (reference), 1 = Suburb, 2 = Rural
High school type	BYCTRL	Categorical dummy	0 =Public (reference), 1 = Catholic, 2 = Private

As previously discussed in Chapter 2, Perna's proposed conceptual model of college choice is one of the theoretical frameworks guiding this study. Figure 2-1 represents how the independent variables used in this study come from Perna's model. The extant literature on Latina/o students' college choice process provides the rationale for choosing the selected independent and dependent variables for this study. To

conduct the necessary analyses for this study, many of the independent variables were recoded into dummy variables. The reference group for each variable is in parentheses.

### **Layer One: The Individual Habitus**

The most prominent layer addressed in this study is layer one: individual habitus. In addition to recognizing that Latina/o students' college choice process is influenced by social networks, layer one addresses a variety of other key demographic and social and cultural characteristics. The variables addressed in layer one are often used in research studies because they're assumed to impact students' college choice process and stages. The following sections describe more specifically those independent variables that developed from layer one of Perna's proposed conceptual model.

#### **Demographic Characteristics**

Previous research studies have examined the impact of gender and race/ethnicity on students' college choice process. Many studies have found that Latina women are more likely to enroll in college than Latino males. However, some studies have found that Latino males are more likely to go off to college, whereas Latina women attend local colleges (Zarate & Gallimore, 2005). The gender gap continues to be evident for every racial group but it is especially prevalent among low-income and students of color (King, 2006). According to Saenz & Ponjuan (2009), Latino males have the lowest degree attainment among all minority males, including African-American males. Despite these disparities in college enrollment, differences in the college choice process of Latina/o students based solely on gender are not always found in research. Therefore, the ELS:02 variable "BYSEX" was analyzed to compare differences in the college choice process of Latina/o males (reference group) and females.

Race/ethnicity has been identified as another salient factor impacting students' college choice process. Research studies suggest that students of different racial/ethnic backgrounds experience the college choice process differently from one another. For example, some researchers suggests that White and Asian students are more likely to successfully navigate the college choice process and enroll in more prestigious institutions (Snyder & Dillow, 2009) in comparison to Black and Latina/o students. In particular, a smaller percentage of Black and Hispanic students enroll in postsecondary institutions compared to their White peers (L. Perna, 2006). However, I am not interested in comparing the college choice process of different racial groups among each other. Therefore, the ELS:02 variable "BYRACE" will not be used to examine the college choice process and enrollment rates of the four dominant racial/ethnic groups in the United States: White, Black, Latina/o, and Asian. Only students who identified as Hispanics were examined for this study.

Other variables that were not included in Perna's model but were provided in ELS:02 and are important towards Latina/o students' college choice process are: family composition and the number of in-home siblings. For example, households that have two working parents are more likely to earn more money than households with only one working parent. A Latina/o household of four that has two working parents is more likely to afford their child's college tuition fees compared to a single-parent household of four family members. As previously discussed, siblings can also be very influential in the college choice process of Latina/o students (Hurtado & Carter, 1997; Gandara, 1995). Therefore, the ELS:02 variables "number of in-home siblings" was analyzed to see whether siblings were significant in students' college choice process.

## **Social Capital**

According to various studies (Ceja, 2006; Cohen, 2009), the amount of social capital students obtain can greatly impact their college choice process and their decision to attend college. In the educational context, social capital refers to the ability social networks can facilitate educational advancement for students (Bourdieu, 1986; Stanto-Salazar, 2004) whether through educational agents, friends, and/or family members. First-generation students often lack the social capital that many of their non-first-generation peers experience since their parents lack first-hand experience with the college choice process (Inkelas & McCarron, 2006). Therefore, first-generation students greatly benefit from the relationships they establish with their institutional gatekeepers because many are unfamiliar with the requirements of higher education and need additional assistance in navigating the college choice process. Institutional gatekeepers provided more than resources to students, they provided valuable information, norms, and support (Coleman, 1988; Bryan et al., 2011). When it comes to obtaining college information, educational gatekeepers “may provide the only source of social capital for low-income students and students of color who are first-generation college students” (Bryan et al., 2011).

For this reason, this study is looking at various social networks that may influence Latina/o students’ college choice process. The primary variable connected to social capital asked Latina/o students what the following individuals – mother, father, friend, close relative, school counselor, favorite teacher, and coach – think is the most important thing for them to do after high school. The variables, BYS66 and F1S44, was not recoded. The only difference between – BYS66 and F1S44 – these two variables is

timing. The first question was asked in 2002 (BYS66) when students' were sophomores and the second variable was asked in 2004 (F1S44) when students' were seniors.

### **Cultural Capital**

Cultural capital refers to general characteristics, such as skills, language, cultural knowledge, and manners that typically derive from one's parents and individual social class status (L. Perna, 2006; Bourdieu, 1986). Many researchers have suggested that Latina/o students' college choice decisions are restricted because of their limited access to the type of social and cultural capital needed to effectively navigate the college choice process (L. Perna & Titus, 2005; L. Perna, 2000). Key variables that impact students' cultural capital include parents' educational attainment (BYPARED), students' generational status (BYGNSTAT), parents' fluency in English (BYPLANG), and students' native language (BYHOMLN). College educated parents, along with having information in their homes about college (L. Perna, 2006), is one form of social capital that may help to promote college enrollment. Studies have proven that first-generation college students' often encounter additional challenges when navigating the college choice process and graduating from college compared to students who have college-educated parents (Ceja, 2001; Choy 2001). Therefore, the ELS:02 variable BYPARED was analyzed to compare the college choice process and enrollment rate between first-generation Latina/os and Latina/os who have college-educated parents.

Latina/o students' generational status, in particular whether students and their parents are U.S. born-citizens or not, may impact their educational experiences and opportunities. For example, the state of Florida is currently debating whether U.S. born students whose parents are undocumented should continue to pay international tuition fees (Hickson, 2012). Therefore, Latina/o students whose parents are either U.S.

citizens or permanent residents, have an advantage in terms of receiving federal funding and paying in-state tuition versus students whose parents are undocumented. As for undocumented students, only 17 states have provisions allowing for in-state tuition rates for these students – California, Colorado, Connecticut, Illinois, Kansas, Maryland, Minnesota, Nebraska, New Jersey, New Mexico, New York, Oregon, Texas, Utah, Washington, Oklahoma, and Rhode Island — either through Board of Regents decisions or state legislation (Morse, 2013). Two of the three states with the largest Latina/o population, California and Texas, currently allow undocumented students to receive state financial aid (Morse, 2013), whereas Arizona, Georgia and Indiana specifically prohibit in-state tuition rates for undocumented students, and two states — Alabama and South Carolina — prohibit undocumented students from enrolling at any public postsecondary institution (Morse, 2013).

Additionally, Latina/o students whose parents were either born or raised in the United States (i.e., third-generation) may have an advantage over first or second-generation Latina/o students when it comes to navigating the K-12 educational system since their parents are familiarized with the American school system. While first-generation Hispanic immigrant youth have made tremendous strides in educational attainment relative to their parents, this trend of upward mobility reverses by the third generation (Perreira, Harris, & Lee, 2007). Contrary to popular belief, second generation Latina/os (i.e., U.S. born with at least one immigrant parent) are more likely to aspire and attend college in comparison to third-generation Latina/o students (Perreira, Harris, & Lee, 2007). Nonetheless, second generation Latina/os are not graduating from college at the same rate as their native non-Hispanic White peers (Fry, 2007).

Moreover, parents' fluency in English is another factor that falls under cultural capital. Latina/o parents who are native English speakers or fluent in English are better able to communicate efficiently with teachers, administrators, and college representatives about their child's education. Some immigrant parents are unable to help their children with school work due to their limited English skills, knowledge of the U.S. educational system, and access to bilingual institutional support from their children's schools (Cruz, Capps, Vericker, & Kuehn, 2009). Consequently, many immigrant parents of low socioeconomic status often rely entirely on their children's school administrators and teachers to make decisions about what is best for their child, education wise (Cruz, Capps, Vericker, & Kuehn, 2009). However, Cruz et al.'s (2009) found that the absence of English spoken in Hispanic households is more detrimental to first generation immigrants in comparison to their second generation Latina/o counterparts. Second generation Latina/os have higher educational attainment than third generation Latina/os even when they live in non-English households (Cruz, Capps, Vericker, & Kuehn, 2009).

Students' native language is an important factor that falls under cultural capital especially, as it relates to students' English fluency. For example, recent immigrants may face more challenges in school compared to native English speakers, in terms of understanding the curriculum, taking standardized exams, or being admitted into advanced placement or honor programs due to their limited fluency in English. This is especially true for students who migrated to the U.S. at an older age. Thus, native English speakers or fluent speakers are more likely to have an advantage over students who are partially or not fluent in English when it comes to navigating the college choice

process. Therefore, the ELS:02 variable labeled native language was selected because it asked students what was their first spoken language. The variable was recoded to include only three options; English (reference), Spanish, and other.

### **Supply of Resources**

Another category selected from Perna's model was supply of resources. This consist of family income and any unmet need the student may have had after all grants had been disperse. However, only family income was provided in ELS:02 to measure for supply of resources. Research suggests that students from low income levels navigate the college choice process differently from students who come from wealthier family backgrounds (Gloria & Segura-Herrera, 2004). Students from more affluent family backgrounds are more likely to obtain the necessary information and resources needed to successfully navigate the college choice process and enroll in college. Accordingly, the ELS:02 variable "BYINCOME" was included to examine differences in the college choice process and enrollment rate of Latina/o students among four groups: low-income, middle class, middle-high income, and high-income class. Research also shows a positive relationship between family income and the number of college applications submitted (Hurtado et al., 1997). The variable F2BO3\_P was included to investigate how the college choice process of Latina/o students differ between students who applied to only one college versus students who applied to more than three.

### **Expected Costs**

Perna's definition of expected cost refers to both the cost of attending a postsecondary institution and the lost wages of attending college. For this study, only cost of attendance is being measured by using ELS:02 variables, "type of institution" students plan to attend and "when students plan to enroll" in college. Cost of

attendance, especially for financially disadvantaged students is found to be one of the main reasons students preferred to attend community colleges over four-year institutions due to lower tuition rates. S. Hurtado et al.'s (1997) found that students' SES was highly associated to the type of institution students considered to attend. Therefore, ELS:02 variable "BYS58" was analyzed to investigate whether the college choice process of Latina/o students differ between students who aspired to attend a four-year college (reference) versus a community college or vocational school. Along with their likelihood of actually enrolling in college. However, the pathway to degree attainment for Latina/o students begins with college enrollment. Therefore, the variable BY57 was examined in order to determine when students planned to enroll in college.

Another important factor in Perna's (2006) layer one conceptual model is demand for higher education (i.e., academic preparation and achievement). However, this is a broad construct previously addressed but it is difficult to measure academic preparation and achievement since each state and school district has their own grading scale. Nonetheless, it is still important to review how demand for higher education impacts the college choice process and decision to enroll in college of Latina/o.

### **Layer Two: School and Community Context**

Other relevant variables investigated in this study relate to Perna's second layer; the school and community context. The following sections describe more specifically those independent variables that were developed from Perna's proposed conceptual model.

#### **School Location-Urbanization**

As supported by the literature, the type of high school Latina/o students attend are critical to their college choice process. For example, urban schools have unique

physical and demographic characteristics that differentiate from suburban and rural school districts. Unlike suburban and rural school districts, urban schools operate in densely populated areas serving significantly more students (Kincheloe, 2004). As a result, urban school districts are frequently marked by higher concentrations of poverty, greater racial and ethnic diversity, larger concentrations of immigrant populations, linguistic diversity, and more frequent rates of student mobility (Kincheloe, 2004, 2010). This impacts the overall quality of education students receive in urban settings compared to students who attend schools in the suburban. Other researchers, have found that urban schools often fail to provide environments of high academic expectations for their students (Griffith, 2000; Noguera, 2003; Valencia, 2000; Valenzuela, 1999).

Nonetheless, rural schools also have their limitations. For example, several student characteristics including large number of students with special needs, limited English skills, and lower college enrollment rates from this student population, often add to the difficulty of recruiting and retaining high-quality and experienced teachers (Monk, 2007). Similar to many urban school districts, rural districts are seriously impoverished. Conversely, rural schools are distanced from highly populated areas which makes it difficult to hire teachers who live in the city. According to Monk's (2007) research, rural schools have very high teacher turnover, a lack of teacher diversity, and a large concentration of children of migrant workers. Many of the teachers at these schools lack proper training to properly teach such populations. As proven by Lee's (2004) study, students who attend schools with high concentrations of low-income Black and Latino students are more likely to have inexperienced or unqualified teachers, fewer

demanding college preparatory courses, more remedial courses, and higher teacher turnover. Therefore, the ELS:02 variable “BYURBAN” was used to analyze Latina/o students’ college choice process and decision to enroll in college based on the type of school students were enrolled in; urban, suburban, or rural school. I also considered including the percentage of students that receive free or reduced lunch (BY10FLP) as an indicator of socioeconomic status of the school however, recent research suggest that high school’s urbanity is a better option (Harwell & LeBeau, 2010).

### **High School Type**

Furthermore, Latina/os have been underrepresented in academically rigorous enrichment programs and courses, such as Gifted, Magnet, Honors, Advanced Placement [AP] and International Baccalaureate [IB] (Gandara & Contreras, 2009), reducing their probabilities of competing in the college pool of selective institutions. According to Brown, Kurzweil, and Tobin, (2005) the more selective institution are the higher the probability students will be retained as a result to the various resources and programs they offer to their students in comparison to community colleges. Other researchers attribute Latina/o students’ underrepresentation in postsecondary institutions to their disproportionate enrollment rates at disadvantaged, overcrowded, and low-achieving K-12 schools (Fry, 2005; Aguirre & Martinez, 1993). Many of these schools have high student-to-teacher ratios and fewer resources to promote and encourage college enrollment (Perna & Titus, 2005). Therefore, the second variable to be examined from ELS:02 was “BYCTRL” which determines if a high school is private, public, or Catholic. The type of high school students attend is important to analyze since it often influences their college choice process and their decision to enroll in college.

### **Layer Three: Higher Education Context**

Another relevant layer addressed in this study is layer three: higher education context. This layer addresses how certain institutional characteristics impact the college choice process of Latina/o students. Before applying or enrolling in a particular postsecondary institution, many students take into account certain institutional characteristics such as: (a) program of study (b) reputation of school (c) cost (d) location (e) personal or family reasons (f) or another reason. Students were also asked, in the 10<sup>th</sup> grade, what type of college (i.e., two-year, four-year, or vocational) they planned to attend after high school. This is important to know because by the 9<sup>th</sup> grade many students are already thinking about college (A.F. Cabrear and La Nasa, 2000b).

#### **Institutional Characteristics**

According to the literature and findings, some of the most influential postsecondary characteristics to Latina/o students when deciding which college to attend are: location, program of study, and financial reasons (Kurlaender, 2006; Fry, 2006; Burdman, 2005). Latina/o students' main reason to attend a community college has to do with their close proximity to home and lower tuition cost in comparison to four-year institutions (Fry, 2006). Since many Latina/o students have close ties with their families many decided to live at home while attending college. This allows students to fulfill familial obligations of caring for family members or contributing to bills. Since community colleges are more accessible to Latina/o students compared to state universities many prefer to enroll at local two-year colleges (Kurlaender, 2006). According to Rooney (2008), students are more likely to enroll in the colleges that offer them the most financial aid. Another important institutional characteristic Latina/o

students take into account is the program of study. This is critical for students who know what they want to major because not every institution offers every major.

### **Methodological Considerations**

Furthermore, it is important to recognize that there are certain methodological considerations which must be addressed that are relevant to this particular study. Understanding these challenges will help to limit any data analysis errors and provided the strongest possible results. A primary methodological concern was the issue of using a secondary dataset. The information needed to answer the research questions was gathered despite the fact that ELS:02 survey questions did not exactly match this study's research questions. After all, ELS:02 data was not collected specifically for this study. Existing research highlights the importance of addressing each of these challenges (Cellini, 2008; Dowd, 2008; Hahs-Vaughn, 2007; Thomas & Heck, 2001). The following subsections go into further detail about the two methodological considerations that need to be taken into account for this study.

#### **Analyzing Secondary Datasets**

For this particular study, the primary methodological concern is the issue of using a secondary dataset. Within the past decades, secondary datasets have become more popular in higher education research (Thomas & Heck, 2001) due to the large number available and the opportunity to use a robust dataset inexpensively (Strayhorn, 2009). When using NCES restricted data files, such as ELS:02, it is imperative for researchers to understand the design effects and weights used in this dataset to insure it is properly analyzed (Hahs-Vaughn, 2007). Despite the benefits of using secondary datasets, there are a variety of disadvantages in using such datasets (Perna & Titus, 2005; Thomas & Heck, 2001). One disadvantage is the oversampling of particular characteristics in

national datasets (Hahs-Vaughn, 2007; Hahs-Vaughn, et al., 2011; Strayhorn, 2009) and another is homogeneity.

Lacking homogeneity may result in incorrect standard errors causing Type I errors. To address the non-independence issue causing homogeneity, it is helpful to consider using a normalized weight and specialized software (Hahs-Vaughn, et al., 2011; Thomas & Heck, 2001). I opted to use a normalized weight from the weights provided by the ELS:02 dataset since the sample only includes Latina/o students and not the entire student population. Accordingly, R-Studio and M-Plus software were utilized for the purpose of this study. R-Studio software is designed to produce correct estimates for data collected through complex sampling methods and M-Plus was used for its ability to conduct multivariate multinomial analyses. Both software's were chosen over other existing programs (e.g. SAS, Stata, Sudaan, SPSS, S-Plus) due to the researcher's familiarity with and access to R-Studio and M-Plus.

Most of the NCES datasets do not use simple random sampling techniques; therefore weights were used to ensure the data are representative of the intended population (Hahs-Vaughn, 2007). Weights are applied during data analysis to minimize the disproportionate influence of the cases or subjects that were oversampled in the complex sampling design (Thomas & Heck, 2001). Failure to apply the weights completely disregards the complex survey sign and will result in analyses that reflects the sample and not the larger population of interest. Analyzing NCES data without using the weights can also violate the independence assumption and generate parameter estimates that are biased (Thomas & Heck, 2001). The weights provided in ELS:02

restricted data files are intended to compensate for the unequal probability of selection of secondary institutions and students that comprise of the final sample in this data.

In addition, these weights adjust for multiplicity at the institutional and student levels, unknown student eligibility, nonresponse, and post-stratification (Wei et al., 2009). The ELS:02 methodology report provides detailed information about the specific purpose and use of each weight included within the dataset. The methodology report and existing research studies (see Hahs-Vaughn, 2005 & 2007; Thomas & Heck, 2001) were utilized to ensure the normalized weight for the sample were calculated correctly and applied accurately during data analysis. As mentioned previously in Chapter 3, this normalized weight will be used to conduct all of the statistical analysis for this study.

### **Estimating Causal Effect with Secondary Data**

A large percent of higher education researchers rely heavily on secondary data and should be aware of the statistical challenges and limitations inherent in using these types of data to claim causality (Titus, 2007). A primary statistical problem in higher education research is self-selection bias (Dowd, 2008; Titus, 2007). Self-selection consists of one or more independent variables included in the statistical model as potentially a 'choice' variable and thus, correlated with the outcome of interest (Millimet, 2001). If this correlation is not properly controlled during the statistical analyses it can result in model misspecification and inaccurate coefficient estimates (Titus, 2007).

By using large secondary datasets, such as NCES and NSF, omitting variable bias is a statistical concern that can often result in self-selection bias. When an independent variable that might influence the outcome variable is not included in the regression model, omitted variable bias takes place (Cellini, 2008). A benefit of using secondary national datasets is the wealth of variables it provides. However, these

datasets may not provide enough information about complex constructs to allow researchers to disentangle the effects of student characteristics that may led them to make certain choices about college (Dowd, 2008; Perna & Titus, 2005). If these variables are not taken into consideration in the logistic regression models, omitted variable bias may result in unreliable estimates because one or more independent variables in the model are correlated with the error term.

In this study, the ELS:02 dataset provides countless variables to properly measure the three stages of Hossler and Gallagher's (1987) college choice process, including the contextual layers of Perna's (2006) conceptual model. Many of the demographic and institutional variables used in this study have been examined by other college choice studies. The variables representing the college choice stages of Hossler and Gallagher's model are students' college degree aspirations (predisposition); seeking college information via way of social networks (search); selecting an institution based off certain reasons (choosing a college); and attending college (enrollment).

### **Analytical Methods**

Furthermore, this section provides an overview of the analytic methods used to address the research questions guiding this quantitative study. The data analysis consisted of two stages, preliminary and advanced. The initial descriptive findings of these analyses were presented in Chapter 3 in conjunction with the sample presentation. The more advanced analyses will be presented in Chapter 4. Quantitative methods were used to address the research questions in this study. The data analysis includes five logistic regression models which allowed for all the research questions to be addressed. As a result, to having multinomial and dichotomous categorical dependent variables and multiple independent variables, the most appropriate statistical

technique to use in this study is logistic regression. It is recommended to use logistic regression in studies where the outcome variable is categorical and the independent variables are categorical or continuous (Peng, Lee, & Ingersoll, 2002).

The preliminary analysis in Chapter 3 highlight key descriptive statistics and frequencies between independent variables. Descriptive statistics were utilized to examine the frequencies of students' demographic characteristics and the types of high schools students' were more likely to attend. In addition, descriptive analyses was used to examine the frequencies of the dependent measures in this study. These descriptive statistics helped identify the percentage of students who aspire to obtain a college degree, who they were more likely to seek for college information, the primary reason they selected an institution, and whether they enrolled in college. Certain variables were recorded in order to comply with this study's interest and to reduce reputation. Afterwards, multiple imputations was performed since there was more than 5% of missing data in the variables. To perform multiple imputations, we used the function mice of the package mice (Buuren & Groothuis-Oudshoorn, 2011) on the software R version 2.15.1 (R Core Team, 2012).

The advanced data analysis includes five multivariate multinomial models, which allowed for all the research questions to be addressed. The first research question investigates whether there is a correlation between the expectations' social networks have for Latina/o students and their aspiration to attend college, which was a multilevel categorical variable. The use of the second and third dependent variables allowed for this question to be sufficiently answered in terms of fully understanding which social networks are most influential in the college choice process of Latina/o students.

The second research question used a dichotomous categorical variable. This question sought to identify which sources Latina/o students were most likely to seek for college information, in both the 10<sup>th</sup> and 12<sup>th</sup> grade, based on the expectations their social networks had for them. The third research question used a dichotomous multinomial categorical variable since it sought to identify whether there is a correlation between the expectations' social networks have for students and their main reason for choosing a college. The final research question goes beyond the college choice process and into students' college enrollment rates. The fourth research question used a dichotomous categorical variable that identifies if there is a correlation between the expectations' social networks have for Latina/o students and their decision to enroll in college after high school. Hierarchical generalized linear models will be applied to both the binary and categorical variables using *M-plus* 7.0 (Raudenbush & Bryk, 2002). *M-plus* was primary used for its ability to analyze multilevel data and take into account the complex structure of the data especially, since this data has weights.

### **Limitation of Study**

Like any other study, there are several limitations that deserve further attention. For one, ELS:02 only follows students from 10<sup>th</sup> grade and two years after their high school graduation, at least for this version. However, it excludes 9<sup>th</sup> grade which according to some researchers consist of a crucial transition year, especially towards the predisposition stage of students' college choice process (A.F. Cabrera and La Nasa, 2000b). This study can only evaluate students two years after high school thus, researchers interested in studying students' college graduation rates will have to wait for ELS:02 third follow up release which was conducted in 2012 but was not available in time for the completion of this study.

Another limitation of this study relates to the self-reported nature of many of the variables used during the data analysis portion. These self-reported variables come from the students and may cause bias in statistical analyses because as human beings individuals may not always recall accurate estimates or may answer based on what they think is expected of them. Therefore, interpreting the variables that are self-reported must be done under a nuanced perspective and acknowledge that these items are self-reported. Moreover, ELS:02 was not solely designed to test Hossler and Gallagher's (1987) and Perna's (2006) models therefore, using secondary data limits the application of these variables to the theoretical frameworks used for this study. The selected survey questions were carefully chosen and modified to appropriately answer the research questions for this study. Although the ELS:02 dataset was the most robust and current dataset available at the time of this study, it was not a perfect match since the survey questions were not created to fit the research questions in this study.

### **Contributions of Study**

This study contributes valuable information to the existing research literature on Latina/o students' college choice process and enrollment rates. First, Hossler and Gallagher's (1987) and Perna's (2006) models provided innovative frameworks for examining Latina/o students' college choice process based on their relationship with specific social networks. Adaption of these two models, for the purpose of this study, allowed for the examination of key variables (e.g., demographic characteristics, social/cultural capital, high school context, institutional characteristics) that typically have been absent from existing studies on Latina/o students' college choice process. The identification of these variables can result in a better understanding of the factors associated with Latina/o students' social/cultural capital and college choice behavior.

Second, this study utilized the most recent nationally representative data to identify the characteristics of Latina/o students who experience the college choice process and actually enrolled in college. Equipped with a better understanding of the college choice process of Latina/o students, policymakers, school administrators, and higher education leaders can begin to develop strategies and programs aimed at increasing Latina/o students' familiarity with college requirements, financial aid literacy, and college enrollment rates at four-year institutions. After all, effective public policies and institutional practices will only help increase the number of first-generation Latina/o students at four-year institutions. In addition to improving the economical dilemma of this country, reducing government dependency, and reducing unemployment rates, higher education will also improve the lifestyle and well-being of Latina/os.

Table 3-20. Summary of multivariate logistic regression models

Independent Variables	Model 1 Predisposition Stage	Model 2 Search Stage	Model 3 Search Stage	Model 4 Choice Stage	Model 5 College Enrollment
<i>Demographic Characteristics</i>					
Gender	X	X	X	X	X
Family composition	X	X	X	X	X
Number of in-home siblings	X	X	X	X	X
<i>Social &amp; Cultural Capital</i>					
Student's native language	X	X	X	X	X
Parent's fluency in English	X	X	X	X	X
Student's generational status	X	X	X	X	X
Parents' educational obtainment	X	X	X	X	X
Social Networks expectation for 10 <sup>th</sup> grader after high school	X	X	X	X	X
Social Networks expectation for 12 <sup>th</sup> grader after high school	X	N/A	X	X	X
<i>Supply of Resources</i>					
Family income	X	X	X	X	X
Number of schools applied to	N/A	N/A	N/A	X	X
<i>Expected Costs</i>					
Type of College	X	X	X	X	X
When students plan to enroll in college	X	X	X	X	X
<i>High school Context</i>					
High school type	X	X	X	X	X
Degree of urbanization	X	X	X	X	X

## CHAPTER 4 DATA ANALYSIS AND RESULTS

The objective of Chapter 4 is to present the data analysis results that were conducted to address the four research questions guiding this study. Results from the descriptive analysis were presented in Chapter 3. The advanced data analysis section presents results from the logistic and multilevel regression models. It concludes with key findings from the data analysis.

### **Advanced Data Analysis**

This section will present results from the advanced data analysis used to address the four research questions guiding this study. First, an ordinal multilevel logistic regression model was conducted to examine Latina/o students' likelihood of aspiring towards a college degree as influenced by the independent variables from Perna's (2006) modified conceptual model. Next, two multilevel logistic regression models were used to examine who Latina/o students were most likely to go to for college entrance information as 10<sup>th</sup> and 12<sup>th</sup> graders. Afterwards, a multinomial model was used to examine the main reason Latina/o students chose their college. Lastly, a binary logistic model was conducted to examine Latina/o students' likelihood of attending college. The results of each regression model are discussed in the following subsections.

#### **Multilevel Ordinal Logistic Regression: Students' College Aspirations**

A multilevel ordinal logistic regression model was used to address the first research question guiding this study. For this question the dependent variable of interest was to determine if there were any differences between Latina/o students' college aspirations and any of the independent variables from Perna's (2006) modified conceptual model. Overall, the model was significant and it predicted 66.9% of Latina/o

students' college aspirations. The first block of variables examine the probability that students would aspire for a college degree as a function of the following demographic variables: gender, family composition, and the number of in-home siblings. However, only gender was found significant ( $p \leq .016$ ) among the demographic variables (Table 4-1). Family composition ( $p \leq .196$ ) and the number of siblings at home ( $p \leq .417$ ) were not found to be significant in determining Latina/o students' college degree aspirations. However, moving from male to female students, the log odds of Latina/o students aspiring for a college degree decreased by 0.227. Thus, Latino males were more likely than Latinas to aspire for a college degree.

The second block of variables examined the probability that students would aspire for college degree based on social and cultural capital (Table 4-1). Social capital was measured by using the expectations social networks had for students. The results indicated that social networks' expectations for the student was not a significant predictor of students' college aspirations (Table 4-1). Cultural capital was measured based off Latina/o parents' educational obtainment, the students' native language, their parents' fluency in English, and the students' generational status. Overall, parents' level of education ( $p \leq .134$ ), students' native language ( $p \leq .244$ ), and generational status ( $p \leq .576$ ) were not found significant in determining Latina/o students' college aspirations. However, parents' fluency in English was found to be a significant ( $p \leq .000$ ) predictor in Latina/o students' college aspirations when controlling for all other variables. For every one unit change in Latina/o parents' fluency in English, the log odds of Latina/o students aspiring for a college degree increased by 0.168. Hence, Latina/o students whose

parents were native English speakers were more likely to aspire for a college degree than students whose parents did not speak English.

The third block of variables pertains to supply of resources as measured by family income and the number of institutions students applied to. The type of college 10<sup>th</sup> graders planned to attend and when they intended to enroll was used to measure students' expected costs (Table 4-1). Despite the findings of other research studies, students' family income was not found significant ( $p \leq .982$ ) towards Latina/o students' predisposition stage. On the other hand, the number of college applications 12<sup>th</sup> grade Latina/o students applied to was found highly significant ( $p \leq .002$ ) to their college aspirations. In particular, for every additional school Latina/o students applied to, the log odds of Latina/o students aspiring for a bachelor's degree or higher decreased by 0.061. Hence, applying to too many schools had a negative impact on Latina/o students' aspirations for a college degree. Perhaps those students who applied to only one or two schools were more confident and convinced about the school they wanted to get in versus students who applied to more than three colleges.

Additionally, the two variables used to measure students' expected costs were also found to be significantly associated with Latina/o students' college degree aspirations (Table 4-1). In particular, when students planned to enroll in college was strongly associated to their degree aspirations ( $p \leq .003$ ). For every one unit change in when students planned to enroll in college, the log odds of Latina/o students aspiring for a college degree increased by 0.175. Ironically, Latina/o students who planned to postpone school after a year or more were more likely to have higher degree aspirations than Latina/o students who planned to enroll in college after high school. Secondly, the

type of college Latina/o students expected to attend was a significant ( $p \leq .000$ ) predictor of students college aspirations. For every one unit change in the type of college Latina/o students planned to enroll in, the log odds of Latina/o students aspiring for a college degree decreased by 1.364. As expected, Latina/o students who planned to attend a four-year college had higher degree aspirations than Latina/o students who aspired to attend a two-year college or vocational school.

The last block of variables entered into the regression model examined Latina/o students' high school context. This context was examined using the degree of urbanization of the school and the type of school (public, private, or Catholic) students attended (Table 4-1). According to the findings, school's urbanization was not a significant ( $p \leq .905$ ) predictor of Latina/o students college aspirations. As for the type of high school Latina/o students enrolled in there was no significant ( $p \leq .133$ ) relationship found between school type and students degree aspirations.

### **Multilevel Logistic Regression: Search Stage in 10<sup>th</sup> grade**

Linear multivariate regression was used to address the second research question guiding this study. The dependent variable of interest consist of the most frequent sources (i.e., parents, guidance counselor, friends, college representatives etc.) 10<sup>th</sup> grade Latina/o students seek for college entrance information. To reduce reputation, only those independent variables found significant for each source are included, instead of highlighting the significant independent variables from each category on Perna's (2006) conceptual model.

The regression model used in this study explained that 45% of the Latina/o student population went to their guidance counselor for college entrance information. According to the findings, only family composition ( $p \leq .005$ ) and the number of schools

Latina/o students applied to ( $p \leq .018$ ) were found significant in the college search stage (Table 4-2). For every one unit change in family composition, the log odds of Latina/o students going to their guidance counselor decreased by 0.024. Thus, Latina/o students who came from a one-parent household versus a two-parent household, were less likely to seek college information from their guidance counselor. For every additional school Latina/o students applied to, the log odds of Latina/o students seeking college information from their guidance counselor increased by 0.011 (Table 4-2). Thus, the more schools Latina/o students applied to the greater the likelihood of them seeking college information from their guidance counselor.

The regression model reported that fewer (38%) Latina/o students went to their teacher for college entrance information. There was only one significant variable found among all the independent variables in the model (Table 4-2); father's desire for their 10<sup>th</sup> grade student ( $p \leq .022$ ). For every one unit change in father's desire for their 10<sup>th</sup> student, the log odds of students seeking college information from their teacher increased by 0.149. Thus, students whose fathers desired for them to do as they please verses going to college were more likely to seek college information from their teachers.

Fewer (15%) students went to their coaches for college information. However, this variable was found much more significant in relationship to other independent variables, such as students' gender, their coaches' desire for them, and the type of college they planned to attend (Table 4-2). There was a statistically significant ( $p \leq .000$ ) difference in the probability of Latina/o males and females seeking college information from their coach. Moving from male to female, the log odds of Latina/o students seeking college information from their coach decreased by 0.582. Latino males were more likely

to seek college information from their coach than Latinas. For every one unit change in the coaches' desire for the student, the log odds of Latina/o students seeking college information from their coach decreased by 0.193. Thus, Latina/o students whose coach desired for them to attend college were more likely to seek college information from them. Further on, the type of college Latina/o students planned to enroll in was significantly ( $p \leq .000$ ) associated with going to their coach for college entrance information. For every one unit change in the type of college, the log odds of Latina/o students who seek college information from their coach decreased by 0.955. More specifically, Latina/o students who planned to attend a four-year college were more likely to seek college entrance information from their coaches than students who planned to attend a vocational school.

As expected, many more Latina/o students (47%) went to their parents for college information than any other source. There was a statistically significant ( $p \leq .021$ ) difference in Latina/o male and female students' decision to seek college entrance information from their parents (Table 4-3). In particular, Latinas were more likely to seek information from their parents than Latina/o males. The level of education parents' obtained was also statistically significant ( $p \leq .034$ ) to students' decision in seeking college information from their parents. Ironically, the higher the level of education obtained by the parent, the less likely students were to seek information from their parents. Another statistically significant ( $p \leq .021$ ) variable was students' generational status. For every one unit change in generational status, the log odds of Latina/o students seeking college information from their parents decreased by 0.108 (Table 4-3).

Immigrant students were more likely to seek college information from their parents than second-generation Latina/os.

Approximately, 43% of 10<sup>th</sup> graders went to their friends for college entrance information. Similar to parents, there was a statistically significant ( $p \leq .002$ ) difference in the probability of Latina/o male and female students seeking college information from their friends. Moving from male to female, the log odds of students seeking college information from their friends increased by 0.357 (Table 4-3). Students' decision to attend a four-year, two-year, or vocational school (type of college) was also significant ( $p \leq .045$ ). However, students who planned to enroll in a vocational school were less likely to seek college information from their friends than Latina/o students who planned to enroll in a four-year institution. On the other hand, fewer students (28%) reported to obtained college information from their siblings. Only two statistically significant variables were found. This includes the type of college students planned to attend and their relatives' desire for them (Table 4-3). For every one unit change in college type, the log odds of Latina/o students seeking college information from their siblings decreased by .0529. Students who planned to attend a four-year college verses a vocational school were more likely to seek out their siblings for college information. Another significant difference ( $p \leq .05$ ) was found between the desire close relatives had students and their decision to go to their siblings for college admissions information.

Contrary to their siblings, Latina/o students were more likely (30%) to go to their relatives for college information. A statistically significant difference was found among gender ( $p \leq .002$ ), the type of college students planned to attend ( $p \leq .024$ ), when students planned to enroll ( $p \leq .034$ ), and their friends' desire for them ( $p \leq .026$ ) and

probability of students acquiring college entrance information from relatives. Moving from male to female, the log odds of Latina/o students seeking information from relatives increased by 0.375 (Table 4-4). Latina/o students who planned to attend a two-year college or vocational institution and planned to attend college after high school were less likely to seek college information from their relatives (Table 4-4). For every one unit change in their friends' desires, the log odds of students seeking college information from their relatives increased by 0.084.

Furthermore, the probability of 10<sup>th</sup> grade Latina/o students seeking college information from college sources were as follow: (34%) gather information from college publications, (24%) from college representatives, and (33%) from college search guides. A statistically significant probability ( $p \leq .007$ ) was found among Latina/o male and female students decision in obtaining college information from college publications (Table 4-4), along with their parents' level of education ( $p \leq .014$ ). However, the higher the level of education of the parent the less likely students were to seek college information from college publications. The number of college applications students applied to were statistically significant in students decision to obtain college entrance information from college publications ( $p \leq .008$ ) and college search guides ( $p \leq .001$ ) (Table 4-4). As for college representatives, parents' fluency in English ( $p \leq .007$ ) and the type of college students planned to attend ( $p \leq .00$ ) were all statistically significant to the students' decision of seeking college entrance information from college representatives (Table 4-4).

As for students who did not go to any of these sources (24%), only four independent variables were found to be statistically significant (Table 4-5). Latino males

were more likely not to seek college information from any of the other sources compared to Latinas. The number of college applications Latina/o students applied for was statistically ( $p \leq .001$ ) related to their probability of not seeking college information from any of the above sources. When students planned to enroll in college and the type of college they planned to attend were both found to be significantly ( $p \leq .00$ ) related to their decision not to seek college information from any of these sources. For every one unit change in the type of college, the log odds of students not seeking college information from any source decreased by 0.875. However, for every one unit change in when students planned to enroll in college the log odds of them not seeking information from any of the others sources increased by 0.267.

### **Multilevel Logistic Regression: Search Stage in 12<sup>th</sup> grade**

The second research question pertains to students' search stage as 10<sup>th</sup> and 12<sup>th</sup> graders. However, for this model we are looking at those sources students were more likely to seek for college information as 12<sup>th</sup> graders. The previous model looked at the sources students seek as 10<sup>th</sup> graders. The sources consist of school counselors, teachers, parents, family, friends, libraries, college sources, and none of the above. Only those independent variables found significant for each source are included in this section.

The regression model used in this study explained that 62% of 12<sup>th</sup> grade Latina/o students went to their guidance counselor for college entrance information. This is a much higher rate compared to their 10<sup>th</sup> grade results. According to the findings, there were many significant variables related to students' decision to seek college information from their guidance counselor. Students' generational status ( $p \leq .007$ ), the number of college applications they applied to ( $p \leq .040$ ), their guidance

counselors desire for them ( $p \leq .000$ ), and their teachers desire for them ( $p \leq .013$ ) were all statistically significant to the students' decision to seek college information from their school counselor (Table 4-6). For every one unit change in students' generational status, the log odds of students going to their school counselor decreased by 0.326 (Table 4-6). In particular, the number of college applications students applied to as 12<sup>th</sup> graders were significantly ( $p \leq .000$ ) related to their decision in seeking college information from their guidance counselor. However, for every one unit change in school counselors' desire for the student, the log odds of Latina/o students going to their school counselor increased by 0.355. On the contrary, for every one unit change in teachers' desire for the student, the log odds of students going to their 12<sup>th</sup> grade school counselor decreased by 0.206. The regression model also reported that fewer (46%) Latina/o students went to their teacher for college entrance information. Only one independent variable was found significant (Table 4-6); the number of college applications' Latina/o students applied to ( $p \leq .025$ ). For every one unit increase in college applications, the log odds of 12<sup>th</sup> grade students seeking college information from their teacher's increased by 0.047. Hence, the more college applications students applied to the more likely they were to seek college information from their teacher.

Moreover, fewer Latina/o students (39%) went to their parents for college entrance information as 12<sup>th</sup> graders than as 10<sup>th</sup> graders. Nonetheless, there were more significant variables found (Table 4-6): students' native language ( $p \leq .001$ ), their generational status ( $p \leq .003$ ), parents' educational obtainment ( $p \leq .024$ ), friends' desire for 10<sup>th</sup> graders ( $p \leq .003$ ), and counselors' desire for 12<sup>th</sup> graders ( $p \leq .037$ ). More specifically, non-native English speakers were less likely to go to their parents for

college entrance information compared to native English speakers (Table 4-6). For every one unit change in students' generational status, the log odds of them seeking college information from their parents increased by 0.256 (Table 4-6). In term of Latina/o parents' educational attainment, for every one unit increase the log odds of students seeking information from their parents' decreased by 0.135 (Table 4-6). As for friends' desire, for every one unit change the log odds of students obtaining college information from their parents' decreased by 0.125. On the contrary, for every one unit change in the counselor's desire for the student, the log odds of students obtaining college information from their parents' increased by 0.151.

Furthermore, the variables 'relatives' and 'siblings' were recoded into a new variable named 'family.' However, this variable was not as significant as the variable 'relatives' was in the previous model. Approximately, 38% of Latina/o students reported to having gone to their family members for college information. The only significant difference was found between students' generational status ( $p \leq .001$ ) and their decision to obtain college information from family members as 12<sup>th</sup> graders (Table 4-7). More specifically, for every one unit increased in generational status, the log odds of students going to their family for college information decreased by 0.291.

A similar rate (45%) of 12<sup>th</sup> grade Latina/o students went to their friends for college entrance information compared to when they were 10<sup>th</sup> graders (43%). There was a statistically significant ( $p \leq .030$ ) difference in the probability of 12<sup>th</sup> grade Latina/o male or female students seeking college information from their friends (Table 4-7). Comparable findings found that 12<sup>th</sup> grade Latinas were more likely than Latino males to go to their friends for college information. The second significant variable ( $p \leq .039$ ) was

found between the desires' teachers had for 10<sup>th</sup> grade students and the students' decision to go to their friends for college information. For every one unit change in teachers' desire for the student, the log odds of students seeking college information from their friends increased by 0.159.

The probability of 12<sup>th</sup> grade Latina/o students seeking college information from any college source such as, college publications, college representatives, and college search guides were the second highest (61%) source, next to guidance counselor. These three variables were recoded into one variable called college sources. A statistically significant probability ( $p \leq .003$ ) was found among Latina/o male and female students' decision in obtaining college information from college sources (Table 4-7). In particular, Latinas were more likely to obtain college information from college sources than Latino males. Moreover, the desire close relatives ( $p \leq .047$ ), counselors ( $p \leq .001$ ), and teachers ( $p \leq .000$ ), had for 12<sup>th</sup> grade students was found significant in their decision to seek college knowledge from different college sources (Table 4-7). More specifically, for every one unit change in school counselor and relatives' desire for students, the log odds of them obtaining postsecondary information from college sources increased by 0.238 and 0.090, respectively. On the other hand, for every one unit change in teacher's desire for 12<sup>th</sup> grade students, the log odds of them obtaining information from college sources decreased by 0.236. The number of college applications students applied to was another variable found to be significant ( $p \leq .000$ ). Lastly, the type of college students planned to attend was found statistically significant in their decision to obtain information from various college sources ( $p \leq .00$ ). More precisely, students who planned to attend a vocational school were less likely to pursue

college information from college sources than students who planned to attend a four-year college. A new variable that was included in this model but was not made available for previous model was 'libraries'. This variable was recoded to include public libraries, school libraries, and college libraries as a source students used to pursuing college information. Approximately 20% of Latina/o students went to libraries for college entrance information. However, no independent variable from Perna's modified conceptual model was found to be statistically significant in testing students' college search stage (Table 4-8).

As for students who did not go to any (21%) of these sources for college entrance information, only three independent variables were found to be statistically significant (Table 4-8). The desire 12<sup>th</sup> grade school counselors ( $p \leq .000$ ) and teachers ( $p \leq .000$ ) have for Latina/o students was found significant in their decision to not seek college information from any of the above sources. In particular, for every one unit change in school counselors' desire, the log odds of students not seeking information from any source decreased by 0.371. As for every one unit change in teachers' desire, the log odds of students not seeking college information from any of the above sources increased by 0.372. The number of college applications Latina/o students applied for were also statistically significant ( $p \leq .000$ ). For every one unit increase in college applications, the log odds of Latina/o students not seeking college information from any of the previous sources decreased by 0.160, which is more than what it decreased when students were in 10<sup>th</sup> grade (0.087).

### **Multilevel Multinomial Logistic Regression: Choice Stage**

Multinomial logistic regression was used to test the choice stage, as it relates to the main reason they selected their chosen college. The majority of Latina/o students

chose college location (28%) as their main reason of attending their chosen college, followed by other reasons (22%). The four remaining reasons students selected their chosen college were: program of study (19%), affordability (11%), college's reputation (10%), and family reasons (10%). There were a few variables found significant in this model. This includes the type of college students planned to attend and the expectations social networks had the as 10<sup>th</sup> and 12<sup>th</sup> graders. More specifically, for every one unit increase in the type of college Latina/o students planned to enroll in there was a 0.302 increased in the relative log odds of students selecting their chosen college based on reputation versus college programs (Table 4-9). There was no significant relationship found between any independent variables and whether students selected their chosen college based on the school's cost versus college programs (Table 4-9). However, there was a significant ( $p \leq .015$ ) relationship found between the type of college students planned to enroll in and their decision in selecting their chosen college based on location versus college programs (Table 4-10).

Furthermore, a significant relationship existed between the desire Latina/o students' coaches ( $p \leq .012$ ) had for them as 10<sup>th</sup> graders and their teachers' desire for them ( $p \leq .007$ ) as 12<sup>th</sup> graders (Table 4-10). A one-unit change in coaches' desire for 10<sup>th</sup> grade Latina/os resulted in a 0.170 increased in the relative log odds of students selecting their chosen college based on personal or family issues versus college programs. However, for every one-unit change in teachers' desire for 12<sup>th</sup> grade students, the relative log odds of them selecting their chosen college based on personal or family issues versus college programs decreased by 0.184. A significant relationship also existed between the desire Latina/o students' friends ( $p \leq .016$ ) had for them and

their decision to choose a college based on other reasons not listed versus college programs (Table 4-11).

### **Logistic Regression: College Enrollment**

The fifth question used a linear multivariate regression model to examine if there were significant probabilities between Latina/o students enrolling in college and any of the independent variables used from Perna's modified conceptual model. The findings concluded that 63% of Latina/o students enrolled in college within the first two years after their high school graduation and 36% did not.

Of the six blocks of variables entered into the regression model, only the fourth and fifth block of variables had significant differences (Table 4-12). The fourth and fifth block examined the supply of resources students had access to and their expected college costs. The variables included in these two blocks were family income, number of schools applied to, type of college, and when students planned to enroll in college. In particular, the number of college applications students applied to was statistically significant ( $p \leq .000$ ) to students' decision to enroll in college or not. For every one unit increase in colleges applied to, the log odds of students enrolling in college increased by 0.422. As for the type of college students planned to attend, this variable was found significant ( $p \leq .002$ ) in students decision to enroll in college or not. For every one unit change in college type, the log odds of students enrolling in college increased by 0.365. Thus, Latina/o students who planned to enroll in a vocational school versus a four-year college were more likely to enroll in postsecondary school.

Layer two of Perna's modified conceptual model was also found to have a significant difference between one of the two variables included: type of high school and degree of urbanization of the school (Table 4-12). There was a statistically significant ( $p$

≤ .000) probability that Latina/o students who attended a public high school versus a private or Catholic school were more likely to attend college. For every one unit change in high school type, the log odds of Latina/o students enrolling in college after high school decreased by 0.712. As for the school's degree of urbanization there was no significant variable found in the model.

### **Chapter Summary**

Chapter 4 presents findings from the advanced analyses. This includes one multilevel ordinal logistic regression, two multilevel logistic regressions, one multilevel multinomial logistic regression, and one logistic regression. The variables significantly associated with 10<sup>th</sup> grade Latina/o students college aspirations are; students' degree aspirations, gender, Latina/o parents' fluency in English, the number of college applications submitted, the type of college student's planned to attend, and whether students enrolled in college or not, when all other variables are controlled.

Students search stage had the most significant variables in comparison to the other models. Finding show that who 10<sup>th</sup> grade students went to for college information was found statistically significant with the following variables: students' gender, family composition, parents' fluency in English, students generational status, parents' educational obtainment, social networks' desire for 10<sup>th</sup> grader, the number of colleges applied, the type of college student planned to attend, and when students planned to attend. Similar independent variables were found significant in students search stage while in the 12<sup>th</sup> grade. These variables included students' gender, native language, generational status, parents' educational obtainment, social networks' desire for 10<sup>th</sup> and 12<sup>th</sup> grade student, the number of colleges applied, the type of college student planned to attend, and when students planned to attend.

As for students choice stage, the type of college students planned to attend, the desire high school coaches had for them as 10<sup>th</sup> graders, and their teachers' and friends' desire for them while in 12<sup>th</sup> grade, were all found to be statistically significant in students' decision to choose a college based on certain characteristics. The final model examined whether Latina/o students enrolled in college. Only three variables were found significant to this model and they were number of colleges they applied to, the type of college they planned to attend, and the type of high school they attended. The next chapter will expand on the discussion of these statistical findings within the context of the theoretical frameworks used for this study and the extant literature.

Table 4-1. Results of multilevel ordinal logistic regression model on Latina/os' college aspirations

Independent Variables	Estimate	Two-tailed p-value
<i>Demographic Characteristics</i>		
Gender	-0.227	0.016*
Family composition	0.031	0.271
Number of in-home siblings	-0.063	0.359
<i>Social and Cultural Capital</i>		
Student's native language	-0.072	0.243
Parent's fluency in English	0.168	0.000
Student's generational status	0.043	0.576
Parents' educational attainment	0.065	0.135
Social networks' expectation for 10 <sup>th</sup> grader after high school		
a. Mother	0.044	0.418
b. Father	-0.017	0.738
c. Friend	0.016	0.591
d. Close relative	0.031	0.459
e. School counselor	0.002	0.963
f. Favorite teacher	-0.025	0.597
g. Coach	0.010	0.829
Social networks' expectation for 12 <sup>th</sup> grader after high school		
a. Mother	-0.037	0.268
b. Father	-0.019	0.667
c. Friend	0.030	0.341
d. Close relative	0.036	0.104
e. School counselor	-0.029	0.503
f. Favorite teacher	-0.023	0.604
g. Coach	0.002	0.964
<i>Supply of Resources</i>		
Family income	0.001	0.982
Number of schools applied to	-0.061	0.002**
<i>Expected Costs</i>		
Type of college	-1.364	0.000***
When student planned to enroll in college	0.175	0.003**
<i>High school &amp; Community Context</i>		
High school type	0.151	0.060
Degree of urbanization	0.008	0.918

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$

Table 4-2. Results of multilevel logistic regression model on 10<sup>th</sup> graders' college search stage

Independent Variables	School Counselor		Teacher		Coach	
	Estimate	Two-tailed p-value	Estimate	Two-tailed p-value	Estimate	Two-tailed p-value
<i>Demographic Characteristics</i>						
Gender	0.081	0.477	0.164	0.152	-0.582	0.000***
Family composition	-0.024	0.005**	0.023	0.512	0.027	0.618
Number of in-home siblings	0.093	0.242	-0.004	0.957	-0.095	0.464
<i>Social &amp; Cultural Capital</i>						
Student's native language	-0.025	0.708	0.013	0.845	-0.060	0.604
Parent's fluency in English	0.040	0.505	0.084	0.210	-0.017	0.847
Student's generational status	-0.100	0.275	-0.029	0.767	0.099	0.495
Parents' educational attainment	-0.024	0.614	0.006	0.904	-0.055	0.498
<i>Social networks' expectation for 10<sup>th</sup> grader</i>						
a. Mother	0.048	0.425	-0.077	0.171	-0.012	0.896
b. Father	0.034	0.609	0.149	0.022*	0.063	0.457
c. Friend	-0.007	0.842	-0.013	0.704	-0.021	0.709
d. Close relative	0.001	0.979	0.049	0.346	0.069	0.313
e. Counselor	-0.070	0.304	0.004	0.947	-0.019	0.863
f. Teacher	-0.001	0.991	-0.113	0.064	0.062	0.462
g. Coach	-0.029	0.652	-0.016	0.749	-0.193	0.045*
<i>Supply of Resources</i>						
Family income	0.015	0.753	0.055	0.302	0.057	0.431
Number of schools applied to	0.011	0.018**	0.013	0.469	-0.021	0.520
<i>Expected Costs</i>						
Type of college	-0.129	0.660	-0.273	0.129	-0.955	0.000***
When do you plan to enroll in college	-0.110	0.132	-0.011	0.830	0.097	0.194
<i>High school &amp; Community Context</i>						
High school type	-0.145	0.100	0.136	0.184	0.061	0.712
Degree of urbanization	0.037	0.716	-0.001	0.996	-0.022	0.868

\* p ≤ .05, \*\* p ≤ .01, \*\*\* p ≤ .001

Table 4-3. Results of multilevel logistic regression model on 10<sup>th</sup> graders' college search stage

Independent Variables	Parent		Friends		Siblings	
	Estimate	Two-tailed p-value	Estimate	Two-tailed p-value	Estimate	Two-tailed p-value
<i>Demographic Characteristics</i>						
Gender	0.279	0.021*	0.357	0.002**	0.051	0.685
Family composition	-0.013	0.718	0.025	0.485	-0.036	0.329
Number of in-home siblings	-0.066	0.365	-0.054	0.486	0.003	0.971
<i>Social &amp; Cultural Capital</i>						
Student's native language	-0.101	0.119	0.119	0.095	-0.101	0.169
Parent's fluency in English	-0.064	0.243	0.072	0.222	-0.054	0.415
Student's generational status	-0.221	0.004**	0.057	0.512	-0.121	0.163
Parents' educational attainment	-0.108	0.034*	-0.024	0.647	0.038	0.455
<i>Social networks' expectations for 10<sup>th</sup> grader</i>						
a. Mother	-0.012	0.831	-0.089	0.208	-0.040	0.446
b. Father	0.073	0.203	0.134	0.057	0.000	0.998
c. Friend	-0.008	0.815	0.017	0.668	-0.020	0.584
d. Close relative	0.009	0.847	0.068	0.161	0.099	0.050*
e. Counselor	-0.001	0.992	-0.066	0.167	-0.061	0.430
f. Teacher	-0.016	0.776	-0.034	0.586	0.010	0.887
g. Coach	-0.037	0.372	0.032	0.453	-0.014	0.838
<i>Supply of Resources</i>						
Family income	-0.071	0.166	0.048	0.385	0.012	0.846
Number of schools applied to	0.024	0.222	0.011	0.553	0.003	0.908
<i>Expected Costs</i>						
Type of college	-0.240	0.225	-0.326	0.045*	-0.529	0.023*
When do you plan to enroll in college	-0.033	0.561	0.003	0.964	0.072	0.167
<i>High school &amp; Community Context</i>						
High school type	-0.116	0.244	-0.081	0.408	-0.048	0.633
Degree of urbanization	-0.069	0.459	-0.061	0.527	0.112	0.250

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$

Table 4-4. Results of multilevel logistic regression model on 10<sup>th</sup> graders' college search stage

Independent Variables	Relatives		College Publications		College Representatives	
	Estimate	Two-tailed p-value	Estimate	Two-tailed p-value	Estimate	Two-tailed p-value
<i>Demographic Characteristics</i>						
Gender	0.375	0.002**	0.331	0.007**	0.111	0.415
Family composition	0.017	0.679	0.036	0.369	0.017	0.688
Number of in-home siblings	-0.080	0.287	-0.061	0.411	0.101	0.262
<i>Social &amp; Cultural Capital</i>						
Student's native language	-0.060	0.395	-0.002	0.975	0.098	0.284
Parent's fluency in English	0.005	0.941	0.012	0.849	0.199	0.007**
Student's generational status	-0.044	0.598	0.069	0.403	-0.004	0.971
Parents' educational attainment	0.000	0.998	-0.120	0.014*	-0.035	0.541
Social networks' expectations for 10 <sup>th</sup> grader	-0.063	0.271	-0.086	0.182	-0.091	0.214
a. Mother	0.095	0.101	0.086	0.155	0.099	0.175
b. Father	0.084	0.027*	0.037	0.372	0.037	0.404
c. Friend	-0.063	0.194	0.007	0.882	0.018	0.772
d. Close relative	-0.008	0.891	-0.001	0.982	-0.044	0.557
e. Counselor	0.009	0.895	-0.005	0.932	0.027	0.682
f. Teacher	0.007	0.890	-0.019	0.783	-0.008	0.918
g. Coach						
<i>Supply of Resources</i>						
Family income	-0.003	0.961	-0.068	0.171	-0.015	0.810
Number of schools applied to	0.007	0.750	0.057	0.008**	0.037	0.129
<i>Expected Costs</i>						
Type of college	-0.398	0.025*	-0.220	0.196	-0.686	0.000***
When do you plan to enroll in college	0.148	0.037*	-0.032	0.576	0.080	0.224
<i>High school &amp; Community Context</i>						
High school type	-0.131	0.255	0.065	0.470	0.109	0.376
Degree of urbanization	-0.055	0.591	-0.137	0.131	0.013	0.923

\* p ≤ .05, \*\* p ≤ .01, \*\*\* p ≤ .001

Table 4-5. Results of multilevel logistic regression model on 10<sup>th</sup> graders' college search stage

Independent Variables	College Search Guides		None of the above	
	Estimate	Two-tailed p-value	Estimate	Two-tailed p-value
<i>Demographic Characteristics</i>				
Gender	0.236	0.060	-0.307	0.025*
Family composition	0.008	0.840	-0.044	0.294
Number of in-home siblings	0.017	0.838	0.032	0.744
<i>Social &amp; Cultural Capital</i>				
Student's native language	0.024	0.769	0.039	0.629
Parent's fluency in English	0.016	0.822	0.001	0.994
Student's generational status	0.111	0.210	0.010	0.921
Parents' educational attainment	-0.088	0.067	0.026	0.710
Social networks' expectations for 10 <sup>th</sup> grader				
a. Mother	-0.019	0.298	-0.019	0.819
b. Father	-0.071	0.488	-0.071	0.293
c. Friend	0.021	0.723	0.021	0.623
d. Close relative	0.016	0.450	0.016	0.817
e. Counselor	0.056	0.551	0.056	0.454
f. Teacher	0.116	0.814	0.116	0.078
g. Coach	-0.057	0.954	-0.057	0.340
<i>Supply of Resources</i>				
Family income	-0.023	0.662	0.014	0.812
Number of schools applied to	0.072	0.001**	-0.087	0.001**
<i>Expected Costs</i>				
Type of college	-0.313	0.225	-0.875	0.000***
When do you plan to enroll in college	-0.025	0.561	0.267	0.000***
High School & Community Context				
High school type	-0.028	0.789	0.056	0.675
Degree of urbanization	-0.078	0.439	0.056	0.630

\* p ≤ .05, \*\* p ≤ .01, \*\*\* p ≤ .001

Table 4-6. Results of multilevel logistic regression model on 12th graders' college search stage

Independent Variables	School Counselor		Teacher		Parents	
	Estimate	Two-tailed p-value	Estimate	Two-tailed p-value	Estimate	Two-tailed p-value
<i>Demographic Characteristics</i>						
Gender	0.172	0.223	-0.059	0.663	-0.046	0.752
Family composition	0.042	0.383	0.012	0.776	-0.022	0.604
Number of siblings	-0.020	0.847	-0.122	0.160	-0.049	0.562
<i>Social &amp; Cultural Capital</i>						
Student's native language	0.017	0.857	0.169	0.058	-0.247	0.001**
Parent's fluency in English	-0.038	0.641	0.093	0.172	-0.060	0.359
Student's generational status	-0.326	0.008**	0.092	0.314	0.256	0.003**
Parents' educational attainment	-0.048	0.513	0.026	0.603	-0.135	0.024*
<i>Social networks' expectations for 10<sup>th</sup> grader</i>						
	0.108	0.197	0.016	0.843	-0.070	0.400
a. Mother	-0.088	0.259	0.080	0.351	-0.032	0.724
b. Father	0.040	0.520	0.027	0.539	-0.125	0.003**
c. Friend	-0.039	0.572	0.088	0.110	0.102	0.109
d. Close relative	0.087	0.321	-0.043	0.603	-0.079	0.303
e. Counselor	-0.096	0.277	-0.042	0.492	0.045	0.576
f. Teacher	-0.044	0.472	-0.046	0.422	0.041	0.471
g. Coach						
<i>Social networks' expectations for 12<sup>th</sup> grader</i>						
	-0.015	0.768	-0.034	0.411	-0.070	0.136
a. Mother	0.025	0.723	0.048	0.305	0.069	0.243
b. Father	0.051	0.290	-0.047	0.255	-0.017	0.673
c. Friend	-0.002	0.959	0.036	0.318	0.009	0.786
d. Close relative	0.355	0.000***	0.103	0.099	0.151	0.037*
e. Counselor	-0.200	0.014*	-0.027	0.729	-0.077	0.277
f. Teacher	0.022	0.778	-0.102	0.055	-0.040	0.551
g. Coach						
<i>Supply of Resources</i>						
Family income	-0.030	0.668	0.005	0.921	-0.073	0.187
Number of schools applied to	0.102	0.000***	0.047	0.025*	0.020	0.388
<i>Expected Costs</i>						
Type of college	0.334	0.045*	0.131	0.257	0.104	0.307
When do you plan to enroll in college	0.024	0.712	0.016	0.774	0.005	0.941
<i>High school &amp; Community Context</i>						
High school type	-0.297	0.063	0.030	0.779	-0.181	0.108
Urbanization	-0.118	0.396	0.014	0.890	0.012	0.922

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$

Table 4-7. Results of multilevel logistic regression model on 12th graders' college search stage

Independent Variables	Family		Friend		College Sources	
	Estimate	Two-tailed p-value	Estimate	Two-tailed p-value	Estimate	Two-tailed p-value
<i>Demographic Characteristics</i>						
Gender	0.097	0.419	0.263	0.030*	0.577	0.003**
Family composition	-0.009	0.832	-0.016	0.698	0.009	0.843
Number of siblings	-0.041	0.607	-0.070	0.420	0.100	0.317
<i>Social &amp; Cultural Capital</i>						
Student's native language	-0.053	0.471	0.101	0.153	-0.057	0.549
Parent's fluency in English	-0.071	0.304	-0.055	0.278	-0.052	0.495
Student's generational status	-0.291	0.001**	-0.140	0.194	-0.115	0.273
Parents' educational attainment	-0.001	0.992	-0.023	0.700	-0.049	0.498
Social networks' expectations for 10 <sup>th</sup> grader	-0.040	0.669	0.001	0.994	-0.002	0.982
a. Mother	0.057	0.509	-0.040	0.567	0.058	0.454
b. Father	-0.046	0.168	-0.011	0.804	0.052	0.332
c. Friend	0.023	0.688	0.074	0.177	-0.052	0.461
d. Close relative	-0.072	0.293	-0.040	0.597	0.049	0.562
e. Counselor	0.069	0.342	0.159	0.039*	-0.140	0.113
f. Teacher	-0.041	0.579	-0.096	0.160	-0.007	0.926
g. Coach						
Social networks' expectations for 12 <sup>th</sup> grader	-0.009	0.826	0.072	0.141	0.011	0.894
a. Mother	0.017	0.715	0.023	0.758	-0.009	0.905
b. Father	0.049	0.167	-0.007	0.853	-0.006	0.899
c. Friend	-0.032	0.326	-0.046	0.187	0.090	0.047*
d. Close relative	0.090	0.242	0.123	0.146	0.238	0.001**
e. Counselor	-0.013	0.781	-0.061	0.385	-0.236	0.000***
f. Teacher	-0.063	0.166	-0.077	0.188	0.012	0.872
g. Coach						
<i>Supply of Resources</i>						
Family income	-0.044	0.420	0.018	0.739	-0.058	0.343
Number of schools applied to	0.020	0.310	0.028	0.313	0.179	0.000***
<i>Expected Costs</i>						
Type of college	0.197	0.061	0.219	0.053	0.435	0.000***
When do you plan to enroll in college	0.048	0.491	0.094	0.107	-0.030	0.677
<i>High school &amp; Community Context</i>						
High school type	-0.069	0.437	-0.125	0.255	-0.112	0.391
Degree of urbanization	0.110	0.290	-0.028	0.778	-0.171	0.193

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$

Table 4-8. Results of multilevel logistic regression model on 12th graders' college search stage

Independent Variables	Libraries		None of the above	
	Estimate	Two-tailed p-value	Estimate	Two-tailed p-value
<i>Demographic Characteristics</i>				
Gender	-0.178	0.250	-0.341	0.207
Family composition	-0.004	0.915	0.005	0.944
Number of in-home siblings	0.005	0.972	-0.057	0.715
<i>Social &amp; Cultural Capital</i>				
Student's native language	-0.041	0.654	0.054	0.669
Parent's fluency in English	0.011	0.900	-0.064	0.507
Student's generational status	-0.009	0.940	0.051	0.725
Parents' educational attainment	0.021	0.744	0.020	0.831
Social networks' expectations for 10 <sup>th</sup> grader				
a. Mother	-0.050	0.451	0.004	0.972
b. Father	0.109	0.133	0.007	0.929
c. Friend	-0.038	0.387	0.030	0.658
d. Close relative	0.104	0.065	0.015	0.886
e. Counselor	-0.033	0.711	-0.042	0.750
f. Teacher	-0.094	0.217	-0.022	0.865
g. Coach	0.082	0.224	0.056	0.660
Social networks' expectations for 12 <sup>th</sup> grader				
a. Mother	-0.017	0.728	-0.008	0.945
b. Father	0.029	0.645	-0.134	0.287
c. Friend	0.076	0.097	-0.055	0.430
d. Close relative	-0.051	0.277	-0.029	0.657
e. Counselor	0.023	0.720	-0.371	0.000***
f. Teacher	0.090	0.230	0.372	0.000***
g. Coach	-0.042	0.489	0.119	0.150
<i>Supply of Resources</i>				
Family income	0.039	0.602	0.054	0.563
Number of schools applied to	0.025	0.367	-0.160	0.000***
<i>Expected Costs</i>				
Type of college	0.222	0.241	-0.336	0.058
When do you plan to enroll in college	0.012	0.883	0.054	0.557
<i>High School &amp; Community Context</i>				
High school type	0.070	0.549	0.261	0.174
Degree of urbanization	-0.005	0.969	0.277	0.072

\* p ≤ .05, \*\* p ≤ .01, \*\*\* p ≤ .001

Table 4-9. Results of multilevel multinomial logistic regression model on 10th graders' choice stage

Compared to College Programs Independent Variables	School's Reputation		School's Cost	
	Estimate	Two-tailed p-value	Estimate	Two-tailed p-value
<i>Demographic Characteristics</i>				
Gender	-0.010	0.956	-0.160	0.527
Family composition	0.011	0.833	0.025	0.736
Number of in-home siblings	0.021	0.846	0.083	0.538
<i>Cultural &amp; Social Capital</i>				
Student's native language	0.041	0.704	-0.036	0.759
Parent's fluency in English	-0.012	0.886	-0.024	0.825
Student's generational status	0.056	0.686	-0.074	0.641
Parents' educational attainment	0.042	0.603	-0.140	0.143
Social networks' expectations for 10 <sup>th</sup> grader	-0.107	0.188	-0.279	0.065
a. Mother	0.136	0.119	0.228	0.074
b. Father	0.078	0.164	0.000	0.997
c. Friend	0.069	0.453	-0.078	0.554
d. Close relative	-0.056	0.682	0.072	0.713
e. Counselor	-0.130	0.166	-0.035	0.792
f. Teacher	0.113	0.235	0.119	0.207
g. Coach				
Social networks' expectations for 12 <sup>th</sup> grader	0.067	0.244	-0.046	0.528
a. Mother	-0.169	0.055	-0.068	0.512
b. Father	0.024	0.656	0.041	0.542
c. Friend	-0.067	0.129	-0.060	0.271
d. Close relative	0.080	0.317	-0.021	0.828
e. Counselor	-0.033	0.653	-0.180	0.056
f. Teacher	0.055	0.505	0.164	0.085
g. Coach				
<i>Supply of resources</i>				
Family income	-0.110	0.132	-0.019	0.839
Number of schools applied to	-0.005	0.887	0.048	0.213
<i>Expected Costs</i>				
Type of college	0.320	0.037*	0.354	0.102
When do you plan to enroll in college	-0.005	0.950	-0.033	0.758
<i>High School &amp; Community Context</i>				
High school type	0.057	0.690	-0.085	0.588
Degree of urbanization	0.136	0.335	-0.142	0.448

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$

Table 4-10. Results of multilevel multinomial logistic regression model on 12th graders' choice stage

Independent Variables	School's Location		Personal or Family issues	
	Estimate	Two-tailed p-value	Estimate	Two-tailed p-value
<i>Demographic Characteristics</i>				
Gender	0.051	0.843	0.315	0.075
Family composition	-0.017	0.808	0.013	0.789
Number of in-home siblings	-0.169	0.274	0.225	0.067
<i>Cultural &amp; Social Capital</i>				
Student's native language	-0.063	0.673	0.014	0.883
Parent's fluency in English	0.108	0.262	-0.026	0.745
Student's generational status	-0.026	0.876	-0.018	0.874
Parents' educational attainment	0.016	0.873	0.019	0.776
Social networks' expectations for 10 <sup>th</sup> grader	-0.051	0.711	-0.160	0.268
h. Mother	0.029	0.824	0.127	0.239
i. Father	-0.140	0.081	-0.021	0.741
j. Friend	0.101	0.256	-0.011	0.870
k. Close relative	-0.100	0.576	0.175	0.051
l. Counselor	0.024	0.846	-0.157	0.055
m. Teacher	0.171	0.154	0.170	0.012*
n. Coach				
Social networks' expectations for 12 <sup>th</sup> grader	0.026	0.691	0.100	0.067
h. Mother	-0.061	0.519	-0.150	0.112
i. Father	-0.006	0.941	-0.001	0.981
j. Friend	-0.054	0.345	0.007	0.850
k. Close relative	0.008	0.936	0.055	0.350
l. Counselor	-0.081	0.522	-0.184	0.007**
m. Teacher	0.087	0.437	0.66	0.343
n. Coach				
<i>Supply of resources</i>				
Family income	-0.014	0.894	0.019	0.793
Number of schools applied to	-0.054	0.147	-0.060	0.075
<i>Expected Costs</i>				
Type of college	0.596	0.015*	0.107	0.386
When do you plan to enroll in college	0.069	0.547	-0.009	0.916
<i>High School &amp; Community Context</i>				
High school type	0.085	0.653	-0.187	0.170
Degree of urbanization	0.002	0.992	-0.030	0.847

\* p ≤ .05, \*\* p ≤ .01, \*\*\* p ≤ .001

Table 4-11. Results of multilevel multinomial logistic regression model on 12th graders' choice college

Independent Variables	Other reasons vs school's program	
	Estimate	Two-tailed p-value
<i>Demographic Characteristics</i>		
Gender	0.040	0.834
Family composition	0.057	0.404
Number of in-home siblings	0.017	0.912
<i>Cultural &amp; Social Capital</i>		
Student's native language	0.021	0.860
Parent's fluency in English	-0.036	0.791
Student's generational status	0.008	0.914
Parents' educational obtainment	-0.021	0.822
Social networks' expectations for 10 <sup>th</sup> grader		
o. Mother	0.023	0.881
p. Father	0.023	0.882
q. Friend	-0.029	0.667
r. Close relative	0.031	0.728
s. Counselor	0.189	0.123
t. Teacher	-0.179	0.268
u. Coach	0.013	0.935
Social networks' expectations for 12 <sup>th</sup> grader		
o. Mother	0.025	0.737
p. Father	0.002	0.989
q. Friend	-0.173	0.016*
r. Close relative	0.015	0.774
s. Counselor	-0.030	0.803
t. Teacher	-0.166	0.074
u. Coach	0.172	0.060
<i>Supply of resources</i>		
Family income	-0.021	0.831
Number of schools applied to	-0.018	0.677
<i>Expected Costs</i>		
Type of college	0.059	0.711
When do you plan to enroll in college	0.011	0.916
<i>High School &amp; Community Context</i>		
High school type	0.183	0.375
Degree of urbanization	-0.061	0.727

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$

Table 4-12. Results of logistic regression model on students' college enrollment

Independent Variables	College Enrollment Status	
	Estimate	Two-tailed p-value
<i>Demographic Characteristics</i>		
Gender	0.282	0.054
Family composition	-0.073	0.137
Number of in-home siblings	0.045	0.645
<i>Cultural &amp; Social Capital</i>		
Student's native language	-0.042	0.665
Parent's fluency in English	-0.133	0.082
Student's generational status	-0.131	0.253
Parents' educational obtainment	-0.087	0.150
Social networks' expectations for 10 <sup>th</sup> grader		
a. Mother	-0.013	0.838
b. Father	-0.096	0.151
c. Friend	0.048	0.303
d. Close relative	-0.032	0.603
e. Counselor	-0.093	0.374
f. Teacher	-0.007	0.938
g. Coach	0.042	0.570
Social networks' expectations for 12 <sup>th</sup> grader		
a. Mother	0.007	0.876
b. Father	-0.005	0.933
c. Friend	-0.028	0.542
d. Close relative	-0.023	0.577
e. Counselor	0.062	0.356
f. Teacher	0.018	0.797
g. Coach	-0.004	0.948
<i>Supply of resources</i>		
Family income	-0.052	0.401
Number of schools applied to	0.422	0.000***
<i>Expected Costs</i>		
Type of college	0.365	0.002**
When do you plan to enroll in college	-0.106	0.085
<i>High school &amp; Community Context</i>		
High school type	-0.712	0.000***
Degree of urbanization	-0.152	0.217

\* p ≤ .05, \*\* p ≤ .01, \*\*\* p ≤ .001

## CHAPTER 5 DISCUSSION OF FINDINGS

The results presented in Chapter 4 were based on Hossler and Gallagher's (1987) model and Perna's (2006) modified proposed conceptual model of college choice, which guided this study and will be further discussed. To achieve this, Chapter 5 will review the purpose of this study and the research questions that guided this study. Next, the findings will be discussed within the context of the extant research on Latina/o students' college choice process. Within the discussion of the findings, ideas for future research will be further elaborated within Chapter 6. These findings will be presented based on the layers and sections of the conceptual frameworks used in this study.

This study further develops the current literature by examining potential differences that exist within Latina/o students' population and recognizing they are not a monolithic group but a heterogeneous population. Furthermore, this study provides insight into the factors that influence Latina/o students' college choice process and their decision to enroll in college, specifically whether certain social networks influenced their decisions. Overall, this study contributes to the literature by identifying factors that are influential to Latina/o students' college choice process and contributes findings to an area that has a dearth of empirical evidence on this increasingly heterogeneous group.

### **Purpose of Study Revisited**

First-generation students continue to see an increase in their access to postsecondary institutions (Choy, 2001; Strayhorn, 2006). It is estimated that 30% of all college students are considered first-generation (Strayhorn, 2006). Despite increased access to postsecondary institutions, first-generation students continue to differ from their peers when navigating the college choice process, especially in relation to college

enrollment (Inkelas & McCarron, 2006; Saenz, et al., 2007). Specifically, first-generation students typically have lower educational aspirations than non-first-generation (Lohfink & Paulsen, 2005; Saenz, et al., 2007). Therefore, it is critical to examine students' degree aspirations since they often influence whether or not a student will actually pursue a college education. After all, aspirations are typically one of the strongest predictors of students' educational attainment (Park, et al., 2011; Sayrs, 1989). The purpose of this study was to examine whether social networks' expectations for Latina/o students impacts their college choice process and their likelihood to enroll in college.

There are four research questions guiding this study:

- Does the expectations social networks have for Latina/o high school students, along with other key variables, influence students' degree aspirations?
- Does the expectations social networks have for Latina/o high school students, along with other key variables, influence who they're more likely to go to for college entrance information in both the 10<sup>th</sup> and 12<sup>th</sup> grade?
- Does the expectations social networks have for Latina/o high school students, along with other key variables, influence the primary reason students selected their chosen college?
- Does the expectations social networks have for Latina/o high school students, along with other key variables, influence their decision to enroll in college?

In order to examine these research questions, the Educational Longitudinal Study of 2002 was selected as the dataset for this study because it provided the most current and robust dataset available to investigate students' college choice process. Conducting descriptive and logistic regression analyses of the dataset provides information describing potential characteristic differences of Latina/o students associated with how they navigate the college choice process and college enrollment. The following section will discuss the findings of this empirical study based on the theoretical frameworks employed throughout the study.

## **Summary of Research Findings**

The following sections will present the results from the data analysis within the context of the current research on Latina/o students' college choice process and decision to enroll in college or not. To facilitate the discussion of the results, the findings will be presented based on the adapted version of Perna's (2006) proposed conceptual model of college choice, as previously discussed. In particular, demographic characteristics will be discussed first, followed by cultural and social capital, supply of resources, expected costs, and finally school context. The modified model of Perna's (2006) proposed conceptual model of college choice provides a comprehensive lens to examine unique aspects of students' college choice process within the context of the extant literature due to its robust inclusion of variables from both economic and sociologic approaches.

### **Demographic Characteristics**

In order to examine how Latina/o students navigate the college choice process, three demographic variables were selected for this study: gender, family composition and number of siblings living at home. The first demographic variable, gender, was not found significant across all models. However, gender was a significant predictor of Latina/o students' educational aspirations, despite research that have found male and female students to have similar levels of degree attainment (Inkelas & McCarron, 2006). While not all models reported significant findings comparing 10<sup>th</sup> grade Latino male and female students, there were some gender differences found significant and are important to examine.

Primarily, Latina/o male students (36%) were less likely than Latina females (38%) to indicate a preference to aspire to earn a Bachelor's degree rather than a high

school diploma (Table 5-10). Current research has found that male students, regardless of ethnicity, exhibit lower educational expectations than their female peers (Lowman & Elliott, 2010; Mau & Bikos, 2000; Park, et al., 2011). However, earlier research indicated that males typically had higher college aspirations than females (Wilson & Wilson, 1992). While this is partially true in this study, it only pertains to Latino males' aspiration for an associate's degree (Table 5-1). However, Latinas' advanced degree aspirations were not that much higher (22% vs. 18%) than Latino males. Regardless of the conflicting findings in the literature, it is apparent that gender does play a role in Latina/o students' degree aspirations. In connection with future studies, researchers should explore at what age and grade level Latina/o students start considering a high school diploma as a viable final option for their educational aspirations.

Secondly, 10<sup>th</sup> grade Latina/o students were more likely to go to their parents (47%) for college entrance information than any other source; followed by their guidance counselor (45%) and friends (43%). However, from these three top sources gender was only found significant among 10<sup>th</sup> grade students who seek college information from their parents. Gender was also found significant among the following college search sources: coaches, friends, relatives, college publications, and none of the above. According to the findings, 10<sup>th</sup> Latino males (62%) were more likely to go to their high school coach (Table 5-6) for college information versus 10<sup>th</sup> Latina females (47%) who were more likely to go to their parents (37% vs. 31% males), friends (69% vs. 61% males), relatives (76% vs. 69% males), and college publications (80% vs. 74% males). Since males are more involved playing sports throughout high school compared to females, it was no surprise they were more likely to seek college information from

their coaches. Latino males were also more likely (49%) than Latinas (41%) not to seek college information from any of these sources (Table 5-8). But by the 12<sup>th</sup> grade only Latinas were more likely to seek college entrance information from either their friends (72% vs. 67% males) or college sources (93% vs. 89% males) than males (Table 5-10).

Although previous studies have found contrasting findings on the significance of gender on students' college choice process, it is imperative to continue to examine the role of gender on college choice decisions. Especially, as females increase their enrollment rate in postsecondary institution and outnumber their male peers (Snyder & Dillow, 2011). This study indicated that even as early as the 10<sup>th</sup> grade Latino males are already exhibiting lower educational aspirations than their female peers (Table 5-1). Therefore, further examination is necessary to understand what factors are contributing to this gap and recognize any potential differences that may exist between students' gender and how they navigate the college choice process (Park, et al., 2011).

Family composition and number of siblings living at home are two additional variables examined in relations to the college choice process of Latina/o students. Family composition was only found significant across one model; 10<sup>th</sup> graders college search stage. Latina/o students who came from two parent households (57%) versus a single-parent household (55%) were less likely to seek college information from their school counselor as 10<sup>th</sup> graders. In regards to the number of siblings living at home, this variable was not found significant. The majority (47%) of Latina/o students reported to have less than two-siblings living in the same household as them. There is the possibility that Latina/o students in this sample shared similar family compositions and number of siblings living at home compared to students of difference racial groups or

generations. Nevertheless, more exploration is necessary to determine if these variables are significant to Latina/o students' college choice process.

These findings should be further examined within the context of Perna's (2006) proposed conceptual model of college choice, as well as the extant literature. Previous findings on gender might have confounded the variable, "family-composition" and "number of siblings living at home" (Mello, 2009) causing it not to be as significant. Students' gender has not always been conclusive and at times conflicting. Perna's model suggests that numerous variables directly and indirectly influence students' college choice process. Therefore, it is feasible to say other factors examined in this study might have limited the influence of family composition and number of siblings living at-home. Additionally, variables that were not available in ELS:02 might have provided further information on students' college choice process or strengthen the significant level of their variables.

### **Cultural Capital**

The next set of variables examined in this study were centered around the idea of cultural capital, which is a key factor in Perna's (2006) proposed conceptual model due to the inclusion of sociological factors. This study selected four variables to investigate cultural capital: parents' educational level, students' native language, parents' English fluency, and students' generational status. Cultural capital is often a key component in the college choice process. After all, many students rely on others to gain knowledge about future opportunities. Oftentimes these influences come directly from their parents (McDonough, 1997; Tierney & Venegas, 2006). Unfortunately, first-generation students are often placed at a further disadvantage since many lack the necessary cultural capital resources (Terenzini, et al., 1996; Walpole, 2003).

Existing research suggests that parents' level of education can influence students' college choice process and decision to enroll in college (Choy, 2001; L. W. Perna, 2008). Findings from this study support these claims. For example, students whose parents only earned a high school diploma or less, compared to students with college educated parents, were more likely to obtain college entrance information from their parents in both the 10<sup>th</sup> (Table 5-6) and 12<sup>th</sup> grade (Table 5-7), as well as from college publications (Table 5-9). However, this does not imply students are more likely to seek these sources for college entrance information over other sources. But rather that parents' educational levels does impact students' decision to acquired college information from their parents and college publications. Parents' educational attainment was not found significant in the other college choice models.

It is well-documented that students who identified as first-generation are more likely to come from homes where English is not the primary language (Bui, 2002). Previous research suggests that students' native language had no relationship to their degree aspirations, regardless of their parents' education levels (Lowman & Elliott, 2010). In this study, students' native language was found statistically significant to 12<sup>th</sup> grade students' search stage. More specifically, English native speakers were more likely to seek college information from their parents as 12<sup>th</sup> graders than students whose native language was Spanish or another language (Table 5-9). However, there was no significant relationship found between students' native language and the college choice stage or enrollment stage. Despite not being found significant in most models, this variable should not be excluded from future studies because it does contribute to the college choice process. While this study and previous research suggest that students'

native language was not a significant predictor of Latina/o students' college choice process, other research has found that when English is the second language at home, educational aspirations may be lower (Behnke, Piercy, & Diversi, 2004).

In addition to examining the influence of students' native language on their college choice process, this study sought to investigate if there was a significant relationship found between Latina/o parents' English fluency and students' college choice process. This study found that Latina/o students whose parents were native English speakers were significantly less (27%) likely to aspire for a bachelor's degree compared to students whose parents were not fluent English speakers (36%). Overall, students whose parents did not speak English or were partially fluent indicated a higher preference in aspiring for a bachelor's degree or higher compared to students whose parents were fluent or native English speakers (Table 5-2). Despite parents' limited proficiency in English, their expectations or personal struggles may have had a bigger impact on their children's degree aspirations (Hamrick & Stage, 2004).

As for the search stage, there was only a significant relationship found between parents' fluency in English and students decision to obtain postsecondary information from college representatives as 10<sup>th</sup> graders. In particular, students whose parents were fluent (93%) or native English (94%) speakers were more likely to seek college information from college representatives compared to students whose parents were not fluent English speakers (Table 5-8). Many studies do not include parents' English proficiency as a critical factor that impacts students' college choice process (Stanto-Salazar, 2004); therefore, scant information is available in the extant literature. This

variable may have not been as significant as others as a result to the many independent variables included in each model.

This study also examined whether a significant difference existed between Latina/o students' college choice process and their generational status. This variable was only found significant in the college search stage models. For the first search model, 10<sup>th</sup> grade immigrant students were more likely (31%) to seek college information from their parents than second-generation (23%) Latina/o students (Table 5-6). However, by the 12<sup>th</sup> grade second-generation Latina/o students (45%) were more likely to seek college information from their parents than immigrant students (33%) (Table 5-9). On the other hand, immigrant students in 12<sup>th</sup> grade were more likely to seek college information from their school counselors (60%) and family members (58%) than second-generation Latina/o students (Table 5-9).

Unfortunately, there is a dearth of research that examine Latina/o students' college choice process in relations to their generational status. The most common research done on students' generational status pertains to their college enrollment rates and degree aspirations. According to the literature, immigrant youth move upward in the educational ladder compared to their parents but this trend reverses by the second generation (Perreira, Harris, & Lee, 2007). However, students' generational status was not found significant across the other models in particular, the predisposition, choice, and college enrollment stage. More research should examine whether students' generational status is influential in the college choice process when controlling for additional variables or eliminating some of the variables used in this study.

Overall, this study suggests that particular aspects of cultural capital are significant predictors of students' college choice process while simultaneously supporting Perna's (2006) proposal conceptual model incorporation of cultural capital variables. Prior research suggest that cultural capital is influential in students' college choice process (Lowman & Elliott, 2010; McDonough, 1997; Tierney & Venegas, 2006), but oftentimes researchers treat Latina/o students as a homogeneous group. The findings in this study emphasize the need for Latina/o students to be directed to the proper sources where they can obtain accurate college information. As well as, be encouraged early on to participate in college discussions therefore, their chances of navigating the college choice process can be enhanced.

### **Social Capital**

Social capital is another area examined within the context of Perna's (2006) proposed conceptual college choice model. This particular study examined social networks' expectations for students after high school completion. These two independent variables – BYS68 and F1S44 – were significant in the second and third multilevel model which measures the various sources students went to for college information while in the 10<sup>th</sup> and 12<sup>th</sup> grade, respectively. As well as, the multinomial model which measures the main reasons students decided to attend their chosen college. This section will start off with those social networks that were the most significant towards Latina/o students search stage and so on.

In general, Latina/o students were more likely to seek college entrance information from various sources as 12<sup>th</sup> graders than as 10<sup>th</sup> graders. For example, 62% of students went to their school counselor for college information as 12<sup>th</sup> graders versus 45% who went to their guidance counselors as 10<sup>th</sup> graders. Overall, the

expectations school counselors had for 12<sup>th</sup> grade students was a significant predictor to the type of sources students were most likely to seek as seniors. Latina/o students whose school counselor desired for them to do as they wanted after high school were more likely to seek college information from them (90%) than students whose counselor desired for them to attend college (60%). Similar results were found among school counselors' desire for the students and their decision to seek college information from their parents (Table 5-9) and other college sources (Table 5-10).

However, Latina/o students whose school counselor's desire for them to attend college were more likely (61%) to seek college information from none of the above sources compared to only (20%) of students whose counselors' desire for them to do whatever they wanted to after high school (Table 5-10). Many studies have proven that guidance counselors are extremely important in students' college choice stages, in particular first-generation students (McDonough, 2004, Bryan et al., 2011). Although, these findings do not propose that school counselors' desires for Latina/o students have a negative or positive influence on students' search stage, the findings do suggest that school counselors' desire for their student does impact their decision to seek college information from certain sources.

Similar to guidance counselors, more students went to their teachers for college entrance information as seniors (46%) than as sophomores (38%). Teachers' desire for the student was only found significant in the search and choice stage. More specifically, teachers' desires were found significant in students' decision to seek, or not to seek, college information from their school counselor, friends, various college sources, and none of the above sources. Teachers' desires also had an impact on the reason why

some students selected their chosen college. Contrary to school counselors' desire for students, Latina/o students whose teachers' desire for them to attend college were more likely to seek college information from their 12<sup>th</sup> school counselor (60%) and college sources (89%) than students whose teacher's desire for them to get marry, 35% and 71%, respectively. On the other hand, Latina/o students whose 10<sup>th</sup> grade teachers' desire for them to attend college were less likely to obtain college information from their friends (67%) compared to students whose teachers' desire for them to do as they please (82%) after high school (Table 5-10).

The literature provides contradicting findings on the role teachers have on students' college choice process, in particular college aspirations. Many research studies attribute students' college aspirations with teachers who saw potential in them and challenged them to persevere (Butner et al., 2001; Rooney, 2008). Unfortunately, many students come across teachers and counselors who send adverse messages or hold lower expectations for them, which often delimits their college aspirations (Butner et al., 2001; L.X. Perez, 1999). Overall, teachers' desire for their students was influential in both their search and choice stage. Teachers who desire for their students to attend college impacted the type of resources students were most likely to seek for college information. Teachers who desire for students to attend college were found to be significant predictors of Latina/o students' decision to select their chosen college based on personal or family issues versus other reasons (Table 5-11). More research studies should examine teachers' role in students' college choice stages to further understand their level of significance and not only in the predisposition stage.

Moreover, a suitable amount of Latina/o students obtained college information from their friends as 10<sup>th</sup> graders (43%) and as 12<sup>th</sup> graders (45%). The desires' friends had for Latina/o students were only found significant in the search and choice stage. Friends' desires for the student was found significant in students' decision to seek college information from their relatives as sophomore (Table 5-7) and from their parents as seniors (Table 5-9). As well as, influence their decision to select a given college (Table 5-11). Latina/o students whose friends' desire for them to obtain a college degree were less likely to seek college information from relatives (69%) than Latina/os who friends' desire for them to get marry (77%). Then again, Latina/o students whose friends' desire for them to attend college as sophomores, were less likely to seek college information from their parents (33%) as seniors (Table 5-9). In terms of the choice stage, friends' desire for students was a significant predictor of their decision to select their chosen college based on other reason not listed (Table 5-11).

According to the literature, friends can either enhance or deter students' aspirations of attending college (Contreras-Godfrey, 2009; Gomez, 2005). Gomez's (2005) found that peers negatively impacted the college aspirations of Latina/o students who were not planning to attend college. Conversely, P.A. Perez's (2007) study found that students were often encouraged by their friends to attend college, but usually when students are part of a strong peer group who mutually support each other's college aspirations (Contreras-Godfrey, 2009; DiMaggio & Mohr, 1985; Gomez, 2005). However, the findings from this study only pertain to students' search and choice stage. More students should have access to peer group participation who value higher education and frequently converse about their future education (DiMaggio & Mohr,

1985). For this reason, more research is needed to examine the level of influence friends have on Latina/o students' college choice process.

As for close relatives, 30% of Latina/o students went to relatives for college entrance information. The variables siblings and close relatives were combined and recoded in the third model to create a new variable, "family." Latina/o students whose relatives' desire for them to attend college versus doing something else (Table 5-7) were less likely to seek college information from their siblings as 10<sup>th</sup> graders. Then again, 10<sup>th</sup> grade may be too early for Latina/o students to start gathering college information from various sources. Nonetheless, Latina/o students whose friends' desire for them to attend college versus doing something else were less likely to seek college information from college sources (Table 5-10). Although very limited research is done on the influence family members have on students' college choice process, there is no doubt they play a critical role in all three stages. The findings may have been drastically different had students of various races been incorporated.

Another social network found significant in Latina/o students' 10<sup>th</sup> grade search stage (Table 5-6) and their 12<sup>th</sup> grade choice stage were coaches (Table 5-11). Latina/o students whose coaches' desire for them to attend college were more likely to seek college information from them (62%) than students whose coaches' desire for them to get marry (43%) or do whatever they wanted to (38%). In terms of the choice stage, Latina/o students whose coaches' desire for them to attend college versus getting marry, were less likely to select their chosen college based on personal or family issues (Table 5-11). Very limited research is done on the role coaches may have on students' college choice process. Thus, more research should examine the level of influence high

school coaches have on students' decision to navigate the college choice stage and attend college, especially for male students.

Contrary to other sources, the percent of Latina/o students who reported to go to their parents for college entrance information in the 10<sup>th</sup> grade decreased by the 12<sup>th</sup> grade, 47% versus 39%. This may have resulted from an increase in students' decision to seek college information from other sources as 12<sup>th</sup> graders. Earlier research suggested parents had the largest influence on students' educational aspirations (Chapman, 1981). However, other research highlights that constituents, such as peers and teachers, may be a larger influence in students' college choice process (Hossler, et al., 1989; Smith & Fleming, 2006). A significant difference was only found between the desires' fathers had for their 10<sup>th</sup> grade students and their decision to seek college information from their teachers (Table 5-6). Further research should examine the influence fathers and mothers have separately on students' college choice process, especially among single family households.

Of all the social networks' included in this study, guidance counselor' desires were the most significant across Latina/o students search stage. This does not mean that the desires of the other social networks' were not as influential in students' college choice process. Although, it is possible that other variables may have confound some elements of this independent variable (school counselors) from being significant across the other two multilevel logistic regression models which examine students' search stage both as 10<sup>th</sup> and 12<sup>th</sup> graders. For example, fathers' desires for students may have canal out mothers' desire for students. Nonetheless, more exploration is necessary to determine if social networks' desire for student are significant when

eliminating some of variables or when running different models. The extant literature on social networks' expectations for Latina/o students has not been conclusive. For example, recent research has suggested that parents, guidance counselors, teachers, and friends, have a major influence on Latina/o students' college aspirations (McDonough, 2004; Bryan et al., 2001; Contreras-Godfrey, 2009; Rooney, 2008). Other researchers have indicated contradictory findings (L.X. Perez, 1999; Butner et al., 2001; Gomez, 2005) which is why more research should look at the influence of social networks on students' college choice process.

### **Supply of Resources**

Furthermore, Perna's (2006) proposed conceptual model focused on the role of social capital in the college choice process and suggests that key variables such as income and information about college were integral to studying college choice. Earlier college choice models have been criticized for examining the college choice process from the perspective of only high-income families (Hurtado, et al., 1997). Therefore, this study selected two variables to investigate supply of resources: family income levels and number of college applications submitted. Collectively, these two variables created important aspects under supply of resources.

According to previous studies, students' educational aspirations vary based on their family income levels (Fitzgerald, 2004; Trusty, Robinson, Plata, & Ng, 2000). Some research suggests that low socioeconomic status is one of the strongest predictors of lower educational expectations (Hanson, 1994). However, this study does not support or discredit these claims since there was no significant difference found between family income levels and any of the multilevel models. Then again, the variable number of schools applied to may have reduced or canal out the level of significance family

income had on Latina/o students' college choice process. After all, various studies have found parents' income to influence the number of applications students' submitted (M.T. Hurtado, 1997; L. Perna, 2000). Thus, Latina/o students who come from middle or high-income households were probably more likely to apply to more colleges compared to low-income Latina/os, as was found in M.T. Hurtado's (1997) study.

Contrary to family income, the number of college applications Latina/o students applied to were found significant in all of the multilevel regression models except the multinomial model which encompassed the main reason students selected their chosen college. First off, students' college aspirations were significantly related to the number of college applications they applied to. Latina/o students who applied to more than three colleges were more likely to aspire to obtain a college degree and enroll in college than students who applied to only one college (Table 5-3). However, there was no drastic difference among students who applied to three schools (37%) versus one school (36%) and their college aspirations to obtain a bachelor's degree (Table 5-3). Previous research (M.T. Hurtado, 1997) has found family income to be significant to the number of colleges students applied to, as well as mothers' level of education. Although these findings do not support this claim the number of schools students apply to are a key predictor of students' college aspirations, even though the level of significance is small.

Moreover, the number of college applicants Latina/o students applied to during their senior year was also found significant to Latina/o students' search stage, as 10<sup>th</sup> and 12<sup>th</sup> graders. For instance, Latina/o students who applied to more than three colleges were more likely to seek college entrance information from their guidance counselor (Table 5-6), college publications (Table 5-7), and college source guides

(Table 5-8) as 10<sup>th</sup> graders. On the contrary, students who applied to less than two colleges versus students who applied to five schools, did not seek college information from any of the above sources (Table 5-8). Similar findings were found among the number of college applications students applied to and who they went to for college information as 12<sup>th</sup> graders, in particular school counselors and college sources.

Once again, Latina/o students who applied to more than three schools were more likely to obtain college information from their school counselor (69%) in comparison to students who only applied to one school (60%). Regardless of how many college applications they submitted, more students pursue college information from these sources as 12<sup>th</sup> graders than as 10<sup>th</sup> graders. Latina/o students who applied to more than one college were more likely to seek college information from their teacher (Table 5-9) and college sources (Table 5-10). As for students who applied to one school (61%) versus four (49%) were more likely not to seek college information from any of the above sources (Table 5-10). Thus, the number of schools students submitted were found to be statistically significant to the sources students seek the most for college.

There was no significant difference found between the number of applications students applied to and the choice stage. As for college enrollment, there was a significant difference found between the number of college applications students applied to and their decision to enroll in college. For example, students who applied to only one college were less (27%) likely to enroll in college than Latina/o students who applied to four colleges (67%). According to this study's findings, the more schools students applied to the more likely they were to aspire for a college degree, seek college information from school counselors, teachers, and college sources, as well as enroll in

college. Nonetheless, additional research should investigate the degree of significances applying for college applications has on students' college choice process. Perhaps the inclusion or elimination of other variables or statistical models may have enhance the degree of significances college applications have on the college choice process.

### **Expected Cost**

Perna's (2006) model also incorporates the expected cost of college attendance. The two variables examine under this block were the type of institution students planned to enroll in and when they planned to enroll in college, if at all. Collectively, these two variables address the expected cost and its role to the college choice process of Latina/o students. The only independent variable found statistically significant among all the advanced analyses models was the type of college students anticipated enrolling in.

Based off the multilevel ordinal logistic regression model, a significant difference existed between the type of postsecondary institutions students planned to attend and their college aspirations. Latina/o students who planned to attend a community college were more likely to aspire for a bachelor's degree or higher compared to students who planned to attend a four-year college (Table 5-4). Unfortunately, many studies do not take into consideration the type of institutions, two-year versus four-year, students are more likely to aspire to attend (Anderson, 2008; Carreras, 1998; Gomez, 2005; Kao & Tienda, 1998; P.A.Perez, 2007; Wolf, 2007). Although it may seem reasonable for researchers to focus on students' college choice process as a whole, more research should examine at what age and grade level students start to decide which type of college they plan to enroll in as a practicable option for their educational aspirations.

Moreover, 10<sup>th</sup> grade Latina/o students who planned to attend a four-year college versus a vocational school, were more likely to seek college entrance information from

their coaches (62% vs. 19%), siblings (48% vs. 24%), friends (61% vs. 45%), close relatives (69% vs. 50%), and college representatives (88% vs. 66%). Ironically, Latina/o students who planned to enroll in a four-year college versus a vocational school were more likely not to seek college information from any of the above sources (Table 5-8). Similar findings were found among 12<sup>th</sup> grade students who aspired to attend a vocational school versus a four-year college. In particular, students who planned to enroll in a four-year college were less likely to seek college information from school counselors (Table 5-9) and college sources (Table 5-10) than students who aspired to enroll in a vocational school.

In regards to the choice stage, Latina/o students who aspired to attend a vocational college were more likely to choose a college based on the schools' reputation and location compared to students who planned to attend a four-year institution (Table 5-11). A possible explanation for these findings may have to do with students' certainty of attending the best vocational school in their field of interest. According to the literature, Latina/o students are more likely to attend a college based on the school's cost of attendance and close proximity to their homes (Rooney, 2008; Fry, 2006). Unfortunately, ELS:02 does not specify whether the variable location takes into consideration school's distance from students' hometown. Due to limited research on college choice stage it's difficult to compare these results with those of other research studies. However, the type of institution students aspired to attend is critical to their college choice process and requires further examination.

Furthermore, when looking at the binary logistic regression model, the type of college Latina/o students planned to attend was a significant predictor of college

enrollment (Table 5-12). Unfortunately, whether students who aspired to attend a vocational school actually enrolled in a four-year, two-year, or vocational school is left unknown because the dependent variable, F2B07, only measured college enrollment. However, there was no clarification in the type of institution students actually enrolled in. Researchers should further examine how the type of college students plan to enroll in affect their college choice process because students chances of earning a college degree decreases if they start off at a two-year institution verses a four-year college (Fry, 2006). Despite the degree of significances, the type of postsecondary institution a student plans to attend is influential in their decision to choose a particular college and enroll in college.

The second variable examined under expected costs was when students' planned to enroll in college, if at all. This variable was found significant in only two models. Latina/o students who planned to enroll in college after high school were more likely to have higher degree aspirations than students who planned to delay college enrollment after a year or more (Table 5-5). Additionally, 10<sup>th</sup> grade Latina/o students who anticipated postponing college were more likely to seek college admissions information from their relatives than students who planned to enroll after high school (Table 5-7). Similarly, students who anticipated enrolling in college after high school were less likely not to seek college information from any of the above sources compared to students who planned to postpone their education (Table 5-8). Perhaps the inclusion of additional variables may provide further information about students' decision to postpone college.

Almost half of the students in this sample were first-generation students. According to the literature, first-generation students often struggle more when navigating the college choice process since information that is typically conveyed from parents to the student is often unavailable to students whose parents do not have first-hand knowledge of the college choice process (Inkelas & McCarron, 2006). Furthermore, this study did support the notion that students who anticipate enrolling at a four-year institution were significantly more likely to seek college information from various sources. Despite some students that come from disadvantaged situations and have parents that lack experience in the college choice process, many still overcome these disadvantages by seeking proper college information from vital sources.

### **School Context**

The last block of variables investigated in this study were based from layer two of Perna's (2006) model which focuses on the school and community context. In addition to examining high schools' location, this study also considers the type of school students attended. Collectively, these two variables address the school context of the theoretical framework guiding this study and their role on the college choice process of Latina/o students.

Overall, school's urbanization was not found significant in any of the five models pertaining to students' college choice process and enrollment. Nonetheless, this does not mean that school urbanization is not significant to students' college choice process rather this variable should be examined independently. However, a more nuanced look at the socioeconomic levels of schools indicate that this factor, in addition to school location, influence students' decision to attend a two or four-year institution (Engberg & Wolniak, 2010). This study intentionally excluded schools' free lunch percentage as a

measure of the socioeconomic status of schools because Harwell and LeBeau (2010) found high school urbanicity to be a better indicator of schools' socioeconomic status. Despite these findings, a more thorough analysis of schools' socioeconomic levels may provide better insight into whether or not schools' location or the socioeconomic status has a larger influence on Latina/o students' educational aspirations.

In addition to examining school urbanization, this study also investigated whether the type of school (public, private, or Catholic) students attended was statistically significant to their predisposition, search, choice, and enrollment stage. Examining the school context is critical when studying the college choice process of Latina/o students. Contrary to school's urbanicity, a significant difference was found between the type of high school Latina/o students attend and their decision to attend college or not (Table 5-12). While it is assumed that many students attend less funded, less challenging, and lower income schools, (Choy, 2001; Hamrick & Stage, 2004) this is not the case for all Latina/o students. As more Latina/o students navigate the college choice process and enter postsecondary education, it is imperative to see how the role of schools influence students' college choice process. This study only incorporated two school context variables due to the limitation of the dataset used for this study, but more robust and comprehensive school context variables should be considered in future studies. Despite only using two variables to measure school context, this study still found support for Perna's (2006) model. In particular the type of high school students attended was influential in the college choice process of Latina/o students.

### **Final Reflection of Findings**

This study sought to examine how the expectations' social networkers had for Latina/o students after high school influence the college choice process of a national

representative sample of Latina/o students. The previous sections discussed the findings within the context of the theoretical frameworks guiding this study. There are overall themes that span across the five models that warrant further discussion. These themes will be addressed in this section. While the main focus of this study was not found to be significantly related to all the models, these findings do not dismiss the important role social networks have on Latina/o students' college choice process. Social networks' expectations for students was significant in their 10<sup>th</sup> and 12<sup>th</sup> grade search stage, as well as their choice stage. In particular, school counselors and teachers' desires for students were the most significant in students' decision to seek college information from various sources. As supported by the literature, institutional gatekeepers can either enhance or hinder students' degree aspirations based on the covert or overt message they send to students (Butner et al., 2001; Rooney, 2008).

Additionally, parents' educational levels was also found significant in Latina/o students' decision to seeking college information. For example, first-generation Latina/o students were more likely to seek college knowledge from their own parents, despite their parents' lack of experience in higher education. As well as from college publications than students who had college educated parents. Parents' educational attainment has often been significant to students' degree aspirations but have been repeatedly noted to be lower for first-generation students (Choy, 2001; McDonough, 1997; Nunez & Cuccaro-Alamin, 1998; Pascarella, et al., 2004). However, there was no significant difference found between parents' educational attainment and students' degree aspirations. Thus, parental education must be further examined to see what particular aspects influence first-generation students' college choice process.

This study also found students' native language, generational status, and parents' fluency in English to be significant predictors of Hossler and Gallagher's (1987) college choice model. For example, Latina/o students whose parents were native English speakers were more likely to aspire for a college degree than students whose parents did not speak English. By the 12<sup>th</sup> grade, immigrant students were more likely to seek college information from their school counselor and relatives than second-generation students. The only difference between 10<sup>th</sup> and 12<sup>th</sup> grade was that immigrant students were less likely to seek college information from their parents by the 12<sup>th</sup> grade compared to second-generation students. All-encompassing, these findings illustrate how cultural capital, in the sense of family and language, is important to the Latina/o's college choice process. In agreement to previous studies, Latina/o students are a heterogeneous population and their within group differences have had significant influences on how they navigate the college choice process (Phinney, et al., 2005).

A final finding from this study that contributes to the extant literature is the support of Hossler and Gallagher's (1987) college choice model and Perna's (2006) proposed conceptual model in examining Latina/o students' college choice process. Although Perna's (2006) proposed conceptual model has been used in limited studies (Bergerson, 2009), its inclusion of both economical and sociological factors was found suitable for this study. For example, the variables under supply of resources and expected costs were the most significant among all five regression models. Therefore, an emphasis for Latina/o students to apply to multiple colleges, as well as informing low-income or first-generation students about college application waivers their eligible for, is much needed.

Moreover, under expected costs the type of college Latina/o students intended to enroll in was significant across all the models. In particular, Latina/o students who aspired to enroll in a vocational school were more likely to choose a college based on reputation and location. They were also more likely to enroll in college than students who planned to attend a four-year institution. In agreement to other studies (Fry, 2006), the type of college students intend to enroll in influence their probability of obtaining a bachelor's degree. Therefore, high school guidance counselors, teachers, and parents should encourage students to enroll in four-year institutions verses two-year institutions. When students planned to enroll in college was a significant predictor of their predisposition and search stage. According to the literature (Horn, Cataldi, & Sikora, 2006), Latina/o students who postpone college were less likely to graduate from college with a degree. Therefore, a college-going culture is necessary so students can be encouraged and motivated to attend college as traditional college-aged students.

In addition to reviewing general findings from this study, it is important to note this study's limitations. By using a national database, this study was limited to only those variables included in ELS:02, excluding several variables that were included in Perna's (2006) proposed conceptual model. Thus, for future studies more robust social cultural variables should be included to further examine the first layer of Perna's (2006) model. Due to the complexity of the research questions it was not feasible to this for this study. Another limitation pertained to the questions 10<sup>th</sup> grade students were asked about their degree aspirations and college choice process. Some researchers have argued that Latina/o students do not necessary follow the same college choice process as middle-class White students. Therefore, many Latina/o students were probably

uncertain of their degree aspirations due to their age and grade level. As a result, these findings make it difficult to compare those students who were unsure about their future plans as sophomores to those who were certain about their educational aspirations.

Nevertheless, the findings for this study support the relevance of both models when studying Latina/o students' college choice process, along with the inclusion of the multitude of variables selected. The application of Hossler and Gallagher's (1987) college choice model and Perna's (2006) proposed conceptual model to this study support findings in the current literature, while simultaneously providing new information to fill current gaps in the research. This study is able to provide relevant information about potential factors that positively or negatively influence the college choice pathways of Latina/o students and their decision to enroll in postsecondary institutions.

Table 5-1. Results for multilevel ordinal logistic regression model on students' degree aspiration and gender

Degree Aspirations	High school or less	Associate of Art	Bachelor's degree, incomplete	Bachelor's degree	Advanced degree
Male	4%	2%	41%	36%	18%
Female	3%	1%	36%	38%	22%

Table 5-2. Results for multilevel ordinal logistic regression model on students' degree aspiration and parents' fluency in English

Degree Aspirations	High school or less	Associate of Art	Bachelor's degree, incomplete	Bachelor's degree, complete	Advanced degree
Not fluent	4%	2%	41%	36%	18%
Partially fluent	5%	2%	44%	34%	16%
Fluent	6%	2%	47%	32%	14%
Fluency unknown	7%	3%	50%	29%	12%
Native English speaker	8%	3%	52%	27%	10%

Table 5-3. Results for multilevel ordinal logistic regression model on students' degree aspiration and number of schools applied to

Degree Aspirations	High school or less	Associate of Art	Bachelor's degree, incomplete	Bachelor's degree, complete	Advanced degree
Applied to one school	4%	2%	41%	36%	18%
Applied to two schools	4%	2%	39%	36%	19%
Applied to three schools	4%	2%	38%	37%	20%
Applied to four schools	3%	1%	37%	37%	21%
Applied to five schools	3%	1%	36%	38%	22%

Table 5-4. Results for multilevel ordinal logistic regression model on students' degree aspiration and type of college

Degree Aspirations	High school or less	Associate of Art	Bachelor's degree, incomplete	Bachelor's degree, complete	Advanced degree
Four-year college	4%	2%	4%	36%	18%
Two-year college	1%	0%	17%	36%	46%
Vocational school	0%	0%	5%	18%	77%

Table 5-5. Results for multilevel ordinal logistic regression model on students' degree aspiration and when students plan to enroll in college

Degree Aspirations	High school or less	Associate of Art	Bachelor's degree, incomplete	Bachelor's degree, complete	Advanced degree
Yes, after high school	4%	2%	41%	36%	18%
Yes, after one year	5%	2%	44%	34%	15%
Yes, over one year	6%	2%	47%	32%	13%
Yes, but don't know when	7%	3%	50%	29%	11%
No, don't plan to continue my education	8%	3%	52%	27%	10%

Table 5-6. Results for multilevel logistic regression model on 10th graders' college search choice

Variable name	Exp(B)	e/1+e
<i>School Counselor</i>		
<i>Family composition</i>		
Both parents	1.351209	57%
One parent & one guardian or two guardians	1.32313	56%
Mother only	1.295634	56%
Father only	1.268709	55%
One guardian only	1.242344	55%
Parent or guardian lives with student less than half the time	1.216527	54%
<i>Number of schools applied to</i>		
Applied to one school	1.351209	57%
Applied to two schools	1.366155	58%
Applied to three schools	1.381265	58%
Applied to four schools	1.396543	58%
Applied to five schools	1.41199	59%
<i>Teacher</i>		
<i>Father's desire for 10<sup>th</sup> grade student</i>		
Attend college	4.806648	83%
Get a job	5.578947	85%
Attend trade school	6.475333	87%
Join the military	7.515744	88%
Get marry	8.723321	90%
Whatever the student wants to do	10.12492	91%
<i>Coach</i>		
<i>Gender</i>		
Male	1.601595	62%
Female	0.894939	47%
<i>Coach's desire for 10<sup>th</sup> grade student</i>		
Attend college	1.601595	62%
Get a job	1.320486	57%
Attend trade school	1.088717	52%
Join the military	0.897628	47%
Get marry	0.740078	43%
Whatever the student wants to do	0.610181	38%
<i>Type of college student plans to attend</i>		
Four-year college	1.601595	62%
Two-year college	0.616313	38%
Vocational school	0.237165	19%
<i>Parents</i>		
<i>Gender</i>		
Male	0.444413	31%
Female	0.587429	37%
<i>Generational Status</i>		
Immigrant	0.444413	31%
First-generation	0.359874	26%
Second-generation	0.291417	23%
<i>Parental Education</i>		
High school diploma or less	0.444413	31%
Some college but no degree	0.398918	29%
Associate's degree	0.35808	26%

Table 5-6 Continued

Variable name	Exp(B)	e/1+e
<i>Parents</i>		
Bachelor's degree	0.321422	24%
Advanced degree	0.288517	22%

Table 5-7. Results for multilevel logistic regression model on 10th graders' college search stage

Variable name	Exp(B)	e/1+e
<i>Siblings</i>		
<i>Close relative's desire for 10<sup>th</sup> grade student</i>		
Attend college	0.926816	48%
Get a job	1.023267	51%
Attend trade school	1.129754	53%
Join the military	1.247323	56%
Get marry	1.377128	58%
Whatever the student wants to do	1.52044	60%
<i>Type of college student plans to attend</i>		
Four-year college	0.926816	48%
Two-year college	0.546074	35%
Vocational school	0.321744	24%
<i>Friends</i>		
<i>Gender</i>		
Male	1.552707	61%
Female	2.218874	69%
<i>Type of college student plans to attend</i>		
Four-year college	1.552707	61%
Two-year college	1.120752	53%
Vocational school	0.808965	45%
<i>Relatives</i>		
<i>Gender</i>		
Male	2.216657	69%
Female	3.225216	76%
<i>Friend's desire for 10<sup>th</sup> grade student</i>		
Attend college	2.216657	69%
Get a job	2.4109	71%
Attend trade school	2.622164	72%
Join the military	2.851942	74%
Get marry	3.101854	76%
Whatever the student wants to do	3.373666	77%
<i>Type of college student plans to attend</i>		
Four-year college	2.216657	69%
Two-year college	1.488844	60%
Vocational school	1	50%
<i>Do students plan to attend college, if so when</i>		
Yes, after high school	2.216657	69%
Yes, after one year	2.570242	72%
Yes, over one year	2.980229	75%
Yes, but I don't know when	3.455613	78%
No, I don't plan to continue my education	4.006828	80%

Table 5-7 Continued

Variable name	Exp(B)	e/1+e
<i>College Publications</i>		
<i>Gender</i>		
Male	2.880604	74%
Female	4.010837	80%
<i>Parental Education</i>		
High school diploma or less	2.880604	74%
Some college but no degree	2.554867	72%
Associate's degree	2.265963	69%
Bachelor's degree	2.009729	67%
Advanced degree	1.78247	64%
<i>Number of schools applied to</i>		
Applied to one school	2.880604	74%
Applied to two schools	3.049568	75%
Applied to three schools	3.228443	76%
Applied to four schools	3.41781	77%
Applied to five schools	3.618284	78%

Table 5-8. Results for multilevel logistic regression model on 10th graders' college search stage

Variable name	Exp(B)	e/1+e
<i>College Representatives</i>		
<i>Parent's fluency in English</i>		
Not fluent	7.560974	88%
Partially fluent	9.225764	90%
Fluent	11.25711	92%
Fluency, unknown	13.73572	93%
Native English speaker	16.76008	94%
<i>Type of college student plans to attend</i>		
Four-year college	7.560974	88%
Two-year college	3.807604	79%
Vocational school	1.917457	66%
<i>College Source Guide</i>		
<i>Number of schools applied to</i>		
Applied to one school	3.747167	79%
Applied to two schools	4.026913	80%
Applied to three schools	4.327543	81%
Applied to four schools	4.650617	82%
Applied to five schools	4.997811	83%
<i>None of the above sources</i>		
<i>Gender</i>		
Male	0.956954	49%
Female	0.703984	41%
<i>Number of schools applied to</i>		
Applied to one school	0.489002	49%
Applied to two schools	0.467297	47%
Applied to three schools	0.445715	45%
Applied to four schools	0.424336	42%
Applied to five schools	0.403236	40%
Applied to six schools	0.382488	38%

Table 5-8 Continued

Variable name	Exp(B)	e/1+e
<i>None of the above sources</i>		
<i>Type of college student plans to attend</i>		
Four-year college	0.956954	49%
Two-year college	0.398918	29%
Vocational school	0.166294	14%
<i>Do students plan to attend college, if so when</i>		
Yes, after high school	0.956954	49%
Yes, after one year	1.249821	56%
Yes, over one year	1.632316	62%
Yes, but I don't know when	2.131871	68%
No, I don't plan to continue my education	2.78431	74%

Table 5-9. Results for multilevel logistic regression model on 12th graders' college search stage

Variable name	Exp(B)	e/1+e
<i>School Counselor</i>		
<i>Generational Status</i>		
Immigrant	1.514371	60%
First-generation	1.093081	52%
Second-generation	0.788991	44%
<i>School counselor's desire for 12<sup>th</sup> grade student</i>		
Attend college	1.514371	60%
Get a job	2.159766	68%
Attend trade school	3.080217	75%
Join the military	4.392946	81%
Get marry	6.265134	86%
Whatever the student wants to do	8.935213	90%
<i>Teacher's desire for 12<sup>th</sup> grade student</i>		
Attend college	1.514371	60%
Get a job	1.232445	55%
Attend trade school	1.003005	50%
Join the military	0.816278	45%
Get marry	0.664314	40%
Whatever the student wants to do	0.540641	35%
<i>Number of schools applied to</i>		
Applied to one school	1.514371	60%
Applied to two schools	1.676989	63%
Applied to three schools	1.85707	65%
Applied to four schools	2.056489	67%
Applied to five schools	2.277322	69%
<i>Type of college student plans to attend</i>		
Four-year college	1.514371	60%
Two-year college	2.114884	68%
Vocational school	2.953527	75%
<i>Teacher</i>		
<i>Number of schools applied to</i>		
Applied to one school	8.828631	90%
Applied to two schools	9.253483	90%
Applied to three schools	9.698779	91%
Applied to four schools	10.1655	91%
Applied to five schools	10.65469	91%

Table 5-9. Continued

Variable name	Exp(B)	e/1+e
<i>Parents</i>		
<i>Native Language</i>		
English	0.495593	33%
Spanish	0.387128	28%
Other language	0.302401	23%
<i>Generational Status</i>		
Immigrant	0.495593	33%
First-generation	0.640184	39%
Second-generation	0.826959	45%
<i>Parental Education</i>		
High school diploma or less	0.495593	33%
Some college but no degree	0.433008	30%
Associate's degree	0.378326	27%
Bachelor's degree	0.330549	25%
Advanced degree	0.288806	22%
<i>Friend's desire for 10<sup>th</sup> grade student</i>		
Attend college	0.495593	33%
Get a job	0.437359	30%
Attend trade school	0.385968	28%
Join the military	0.340616	25%
Get marry	0.300592	23%
Whatever the student wants to do	0.265272	21%
<i>School counselor's desire for 12<sup>th</sup> grade student</i>		
Attend college	0.495593	33%
Get a job	0.576373	37%
Attend trade school	0.67032	40%
Join the military	0.77958	44%
Get marry	0.906649	48%
Whatever the student wants to do	1.05443	51%
<i>Family</i>		
<i>Generational Status</i>		
Immigrant	1.373003	58%
First-generation	1.026341	51%
Second-generation	0.767206	43%

Table 5-10. Results for multilevel logistic regression model on 12th graders' college search stage

Variable name	Exp(B)	e/1+e
<i>Friends</i>		
<i>Gender</i>		
Male	1.999706	67%
Female	2.601271	72%
<i>Teacher's desire for 10<sup>th</sup> grade student</i>		
Attend college	1.999706	67%
Get a job	2.344331	70%
Attend trade school	2.748348	73%
Join the military	3.221993	76%
Get marry	3.777264	79%
<i>Teacher's desire for 10<sup>th</sup> grade student</i>		
Whatever the student wants to do	4.42823	82%
<i>College Sources</i>		
<i>Gender</i>		
Male	7.814649	89%
Female	13.91545	93%

Table 5-10 Continued

Variable name	Exp(B)	e/1+e
<i>Close relative's desire for 12<sup>th</sup> grade student</i>		
Attend college	7.814649	89%
Get a job	8.550588	90%
Attend trade school	9.355833	90%
Join the military	10.23691	91%
Get marry	11.20097	92%
Whatever the student wants to do	12.25581	92%
<i>School counselor's desire for 12<sup>th</sup> grade student</i>		
Attend college	7.814649	89%
Get a job	9.914517	91%
Attend trade school	12.57864	93%
Join the military	15.95863	94%
Get marry	20.24687	95%
Whatever the student wants to do	25.68738	96%
<i>Teacher's desire for 12<sup>th</sup> grade student</i>		
Attend college	7.814649	89%
Get a job	6.171858	86%
Attend trade school	4.874415	83%
Join the military	3.849718	79%
Get marry	3.040433	75%
Whatever the student wants to do	2.401275	71%
<i>Number of schools applied to</i>		
Applied to one school	7.814649	89%
Applied to two schools	9.346482	90%
Applied to three schools	11.17859	92%
Applied to four schools	13.36982	93%
Applied to five schools	15.99058	94%
<i>Type of college student plans to attend</i>		
Four-year college	7.814649	89%
Two-year college	12.07334	92%
Vocational school	18.65287	95%
<i>Libraries</i>		
<i>No significant variables</i>		
<i>None of the above sources</i>		
<i>School counselor's desire for 12<sup>th</sup> grade student</i>		
Attend college	1.566745	61%
Get a job	1.081123	52%
Attend trade school	0.746022	43%
Join the military	0.514788	34%
Get marry	0.355226	26%
Whatever the student wants to do	0.245122	20%
<i>Teacher's desire for 12<sup>th</sup> grade student</i>		
Attend college	1.566745	61%
Get a job	2.272771	69%
Attend trade school	3.296957	77%
Join the military	4.782675	83%
Get marry	6.937906	87%
Whatever the student wants to do	10.06436	91%
<i>Number of schools applied to</i>		
Applied to one school	1.566745	61%
Applied to two schools	1.335092	57%
Applied to three schools	1.13769	53%
Applied to four schools	0.969476	49%
Applied to five schools	0.826133	45%

Table 5-11. Results for multilevel multinomial logistic regression on 12th graders' college choice stage

Variable name	Exp (B)	e/1+e+e+e+e+e	Percentage
<i>Reputation vs. Program of study</i>			
<i>Type of college</i>			
Four-year college	0.158025	0.056588639	6%
Two-year college	0.213739	0.064654802	6%
Vocational school	0.289095	0.071224963	7%
<i>Cost vs. Program of study</i>			
No significant variables			
<i>Location vs. Program of study</i>			
<i>Type of school</i>			
Four-year college	0.154278	0.05524668	6%
Two-year college	0.27999	0.084695492	8%
Vocational school	0.508139	0.125191349	13%
<i>Family vs. Program of study</i>			
<i>Coach's desire for 10<sup>th</sup> grade student</i>			
Attend college	0.345764	0.131583079	13%
Get a job	0.409835	0.143855575	14%
Attend trade school	0.48578	0.15661132	16%
Join the military	0.575797	0.169794141	17%
Get marry	0.682495	0.183344784	18%
Whatever the student wants to do	0.808965	0.197202557	20%
<i>Teacher's desire for 12<sup>th</sup> grade student</i>			
Attend college	0.242683	0.109039101	11%
Get a job	0.201897	0.098497695	10%
Attend trade school	0.167965	0.088347262	9%
Join the military	0.139736	0.078698153	8%
Get marry	0.116251	0.069639842	7%
Whatever the student wants to do	0.096714	0.061237915	6%
<i>Other reason vs. Program of study</i>			
<i>Friend's desire for 12<sup>th</sup> grade student</i>			
Attend college	0.426135	0.179944211	18%
Get a job	0.358438	0.154774694	15%
Attend trade school	0.301496	0.132513733	13%
Join the military	0.253599	0.11298833	11%
Get marry	0.213312	0.095988003	10%
Whatever the student wants to do	0.179425	0.081281837	8%

Table 5-12. Results for binary logistic regression model on students' college enrollment

Variables name	Exp (B)	e/1+e
<i>Number of schools applied to</i>		
Applied to one school	0.373439	27%
Applied to two schools	0.569498	36%
Applied to three schools	0.868489	46%
Applied to four schools	1.324454	57%
Applied to five schools	2.019803	67%
<i>Type of college student plans to attend</i>		
Four-year college	0.373439	27%
Two-year college	0.537944	35%
Vocational school	0.774916	44%
<i>High school type</i>		
Public school	0.373439	27%
Catholic school	0.183232	15%
Private school	0.089905	8%

Table 5-13. Summary of significant independent variables for each multivariate logistic regression model

Independent Variables	Model 1 Predisposition Stage	Model 2 Search Stage	Model 3 Search Stage	Model 4 Choice Stage	Model 5 College Enrollment
<i>Demographic Characteristics</i>					
Gender	X	X	X		
Family composition		X			
Number of in-home siblings					
<i>Social &amp; Cultural Capital</i>					
Student's native language			X		
Parent's fluency in English	X	X			
Student's generational status		X	X		
Parents' educational attainment		X	X		
Social networks' expectation for 10 <sup>th</sup> grader after high school		X	X	X	
Social networks' expectation for 12 <sup>th</sup> grader after high school			X	X	
<i>Supply of Resources</i>					
Family income					
Number of schools applied to	X	X	X		X
<i>Expected Costs</i>					
Type of college	X	X	X	X	X
When students plan to enroll in college	X	X			
<i>High school Context</i>					
High school type					X
Degree of urbanization					

## CHAPTER 6 IMPLICATIONS AND FUTURE RESEARCH

Chapter 6 will introduce key institutional recommendations related to Latina/o students' college choice process. Suggestions for future research on this context area will be explored to assist in the continued examination of Latina/o and first-generation students' college choice process. Finally, Chapter 6 will close with final thoughts related to this study and the challenges students must overcome in order to successfully navigate the college choice process.

Gaining access to postsecondary education is often seen as a gateway to a variety of other benefits, such as higher salaries, healthier lifestyles, and civic involvement (Baum & Ma, 2007). In comparison to high school students, college graduates earned over twenty thousand dollars more in annual salary (Baum, et al., 2010). Recent evidences suggest that adults who earned at most a high school diploma were three times more likely to smoke than adults who earned a bachelor's degree (NCHS, 2012). These findings highlight the advantages that emerge when people continue their education beyond the high school level and complete a college degree. This further emphasizes the importance of assisting Latina/os, especially first-generation Latina/o students, in pursuing a college degree. Although first-generation Latina/o students are increasing their numbers in college enrollment (Choy, 2001; Strayhorn, 2006), they still encounter various struggles in college access and retention. In particular, first-generation students continue to demonstrate lower degree aspirations than many of their non-first-generation peers (Lohfink & Paulsen, 2005; Saenz, et al., 2007). This may suggest that first-generation students are questioning their ability to earn a college degree. This study highlights characteristics and other factors that

positively influence Latina/os' college choice process. Subsequently, it provides context for institutional recommendations to help improve Latina/o students' opportunity to enroll in college and earn a college degree.

### **Implications for Policy and Institutional Practices**

This study generated numerous suggestions for policy implications relevant to the development of Latina/o students' college choice process. In particular, one of the most significant findings highlight that first-generation students often seek college information from their parents. First-generation students may benefit more in receiving accurate information about college since many of their parents do not have first-hand experience of the college process. To better facilitate first-generation students and parents' access to accurate college information, it is imperative for a college going culture to be in place at students' respective high schools. Previous studies have found that students who attend schools where going to four-year institutions is the norm are more likely to pursue college opportunities (Engberg & Wolniak, 2009, 2010; Hossler, et al., 1999; McDonough, 1997). Therefore, two institutional practices will be recommended for this study that support the idea of creating a college going culture at high schools and the Latino community. The intention of these recommendations is to educate Latina/o families about the college choice process, therefore they can make informed decisions about college.

- State and district policy requiring schools to develop college preparation programs for high schools.
- State and district policy requiring community outreach and partnership with Spanish-language media outlets to share with the Hispanic community information on the pathway to college.

## **Institutional Practices and Recommendations**

These programs should start when students first enter high school since students' degree aspirations are often developed between the eighth and tenth grade (Hossler, et al., 1999). As previously mentioned, it is imperative for first-generation Latina/o students to gather college information early on to successfully navigate the college choice process and develop informed educational aspirations. While it is not possible to provide a complete step by step plan for the institutional practices, high school administrators can use the following recommendations to develop programs that will assist first-generation students to better understand the college choice process. The first institutional practice is for school districts to develop a college preparation program particularly, at schools with a large Latina/o population. The college preparation programs should offer three components: college prep courses, collegiate opportunities, and informative college sessions for parents. A college going culture supports behaviors that relate to students preparing for and applying to college. While college preparation programs are often found in specialized areas of high schools, such as magnet or advance placement programs, they should ideally be accessible to all students (Corwin & Tierney, 2007), not only gifted students.

Each school district should determine what is taught in the elective courses however, schools should have the flexibility to alter the curriculum based on their student population (i.e., first-generation, migrant, low-income). There should be two elective courses offered, one geared towards lower classman and another for upper classman. The purpose for this structure is to eliminate redundancy between both courses and cover more appropriate topics geared towards each grade level. For example, the first college prep program should introduce basic college knowledge, such

as the importance of a college degree and the requirements needed to be admitted to college. Important topics to be discussed, as support by the findings in this study, should include the various types of postsecondary institutions available, the importance of applying to multiple colleges, and the different ways to finance a college education. In particular, conveying to students eligibility to state-wide scholarships, such as Florida's Bright Futures scholarship or Indiana's 21<sup>st</sup> Century Scholars program, so they can prepare and ensure to meet the requirements by their senior year. In this course, students will also be informed of the many resources available to them on the local, state, and national level.

The second college prep course should incorporate more detail information pertaining to college deadlines, requirements for the college application cycle, and how to apply for various financial aid support. This course should be more interactive and grant students the opportunity to work on actual college and financial aid applications. As well as, completing scholarship applications and learning the various styles towards writing a college or scholarship essay. Since many first-generation students lack information pertaining to the cost of postsecondary institutions (Hsiao, 1992; L. Perna, 2004; York-Anderson & Bowman, 1991) more advanced workshops should train school counselors and teachers about the nuances of the financial aid process and the many financial opportunities. As supported by the findings in this study, teachers and school counselors were the most sought out for college information (Horn & Nunez, 2000; Saenz, et al., 2007). Therefore, school counselors should be more knowledgeable of the admissions requirements of various types of postsecondary institutions to be better equipped to advise diverse student groups about potential college options.

Secondly, schools should provide collegiate opportunities for all students. High school seniors should be required to attend a minimum of college readiness activities. Previous college enrollment programs mandated by the government have mainly focused on providing financial support to students. However, this college preparation program should mainly focus in preparing students for their future educational endeavors (L. Perna, Rowan-Kenyon, Bell, Thomas, & Li, 2008). These collegiate opportunities should include college tours, college fairs, financial aid workshops, writing sessions, and college summits. Ideally, high schools should form partnerships with a variety of postsecondary institutions (e.g., selective, liberal arts, Hispanic serving institutions, state colleges, community colleges, research-intensive universities etc.) and have college representatives such as, admission recruiters, financial aid advisors, and academic advisors speak to students about their institution. This component is vital to this study because it found that college sources, such as college publications, guides, and representatives, were the most sought out by Latina/o students for college information. Through these collegiate opportunities, students will have direct connect with various college sources to help enhance their college choice process.

Exposing students to a variety of postsecondary institutions may encourage many, who originally planned to enroll at a two-year college, to reconsider a four-year institution, especially once they hear the benefits of attending a four-year college. In addition, this program will provide students the opportunity to interact with others and converse about college related topics. These interactions should be with fellow classmates, teachers, and counselors. According to the study's findings, friends, teachers, and counselors' desires for the student were found to be the most significant

in their college search stage. Hence, their involvement in students' college decision making should be incorporated in this program and used to reaffirm students' decision to attend college.

Moreover, school counselors and teachers should be reminded to be mindful of the covert and overt messages they send to students about their college readiness and abilities. Particularly, towards low-income, first-generation or Latina/o students who often need additional support and encouragement from institutional gatekeepers compared to students that come from more affluent backgrounds. Based on these findings, school counselors, coaches, and teachers may need to be more intentional, informative, and direct in their messages to students about college expectations. Teachers and counselors can begin to develop and express high expectations for Latina/o students through school-related activities that promote a college-going culture. Overall, this college knowledge program must work to create a school and counseling environment that nurtures students' college aspirations and dreams, specifically first-generation Latina/o students (McClaffery, McDonough, & Nunez, 2002).

According to this study, gender was another significant variable found in Latina/o students' college choice process. In particular, Latina women were more likely to have higher degree aspirations and seek various sources for college information. For this reason, a college summit that is specifically for Latina/o men or men of color should be created as an additional source of support and encouragement for this population. Whether individual schools or the district as a whole should sponsor such event should be left for the district to decide. Overall, the college summit for males should have inspirational male speakers and role models that male students can relate to and would

want to aspire to be like. As well as fun and creative college readiness activities and sessions that capture Latino males' attention.

In regards to Latina/o parents, it is imperative they receive accurate knowledge about college in a timely manner. The college knowledge programs must be developed to fit the unique needs of Latina/o parents in order to successfully disseminate college information to them. For example, schools should host meetings available to parents at convenient locations and with the presence of a Spanish translator. By providing bilingual meetings that are not restricted to a certain time or day, more parents may attend and pass down the information they acquired from these sessions to their children or other Latina/o families. Additionally, school counselors must be willing to alter the information sessions to meet the needs of certain parental populations (e.g., migrant families, recent immigrants, undocumented households, etc.). Informing parents about the various opportunities offered to their children, such as advanced placement courses, dual enrollment, and other college geared programs, despite some parents' legal status, may encourage more Latina/o parents to push their children to take advantage of these opportunities and earn a college degree.

Schools should also emphasize to Latina/o parents about the importance of talking to and encouraging their children to attend college. These dialogue between parent and student will help to make a difference of how students navigate the college choice process. As found in this study, first-generation Latina/o students were more likely to seek college information from their parents than students who had college educated parents. Therefore, school administrators should track those parents that attend the information sessions and follow up with those who have not attended. This

will help to ensure that first-generation families are obtaining the necessary information to help their children get into college. Previous research has noted that first-generation students often lack information related to the costs of postsecondary institutions (Hsiao, 1992; L. Perna, 2004; York-Anderson & Bowman, 1991). To improve the likelihood that first-generation students and families gather the correct information about financial obligations pertaining to postsecondary institutions, school districts should mandate that all ninth-grade students and parents receive informational packets on ways to prepare, save, and pay for college through the college preparation programs. These informational packets should be distributed annually throughout students' high school career to keep families informed about the importance of preparing for college. Information about the various types of financial aid options available to students, along with the limitations and alternatives (e.g., DREAM Act) is important to include.

This information can be disbursed to parents via mail or at informational sessions either on or off campus. In accordance to federal regulations, information sent home should be translated to the language spoken in the student's household. Having a Spanish-speaking translator at these meetings will help to encourage that more non-English speaking parents attend such session. The information provided to parents and students should focus on the big picture and not the complex details that may overwhelm most individuals. For example, a two-page document should list the requirements of the different type of institutions and the average cost for community colleges versus public and private four-year college that are either located nearby or throughout the state. The cost should highlight what the listed tuition is, along with any additional costs. A separate column should display what the average student pays after

federal grants and financial aid are taken into consideration. In addition, a clear overview of the various financial aid options available to students, such as scholarships, grants, loans, and work-study, should be provided. Information for Latina/o students who find themselves in complicated situations should be discussed, in particular students whose parents are undocumented. For example, in Florida many colleges charge American-born students whose parents are undocumented out-of-state fees, despite the students' upbringing or residency in this status. Thus, Latina/o students who find themselves in similar situations should be informed of alternative methods such as, schools that offer in-state tuition and funding.

The policy and institutional recommendations highlight key areas that must be developed in order for schools to provide students with assistance, especially first-generation students who have a variety of disadvantages placed against them. While it may be ideal for all these recommendations to be implemented on a widespread basis, I recognize cost and time may prohibit the implementations of all of them. To address limited funding, school districts and schools should assess which recommendations would be most meaningful at their school and implement the ones that will have the largest impact. Nonetheless, schools that strive to develop a college going culture should provide an environment that assist all students in recognizing that college is an opportunity available to students of all races and backgrounds.

### **Partnership between Spanish-Language Organizations**

The final policy recommendation is related to community outreach and partnership between school districts and Spanish-language media outlets regarding the dissemination of college information within the Hispanic community. Extant literature has continuously highlighted the significant role parents' play in the development of

students' educational aspirations and their navigation in the earliest stages of the college choice process (Chapman, 1981; Flint, 1992; Hossler, et al., 1989). Therefore, parents should have access to college information, such as college preparation programs, funding college, and accessibility to local resources. This type of information should be televised and broadcasted regularly on Spanish stations in order to inform the Hispanic communities about college requirements, deadlines, and resources available to students. The benefits of mandating such partnerships is to inform a larger Hispanic audience that may prove invaluable to Latina/o students' college choice process, especially those who otherwise may not gather college information from their parents.

Additionally, community outreach to Hispanic institutes, such as religious institutions or Hispanic establishments, will help to spread the word to the Latina/o community about the importance of a college education. Information provided to the larger Hispanic community should consist of the necessary steps needed to enroll in college, ways to finance a college education, and opportunities and resources available to high school students. The collaboration between Hispanic institutions and secondary schools will entail the assistance of a variety of constituents that will help to create a college going culture within the Latina/o community. Schools should participate in Hispanic events or functions as a way to engage with the Hispanic community and make their presence visible.

### **Future Research**

There are many differences that exist within the Latina/o student population as it relates to college plans (Olive, 2008; Phinney, et al., 2005) unfortunately, limited information acknowledges this group as a heterogeneous population. A dearth of evidence exists on the preparation methods Latina/o students utilize when trying to gain

access to postsecondary institutions (Gofen, 2009). While this study provides insight on the within group differences of Latina/o students, further research is necessary to better understand students' college choice process and the pathways they take to gain access to postsecondary institutions. Based on this study's findings, there are five main areas that need further research to strengthen Latina/o students' college choice process: the role of social networks, postsecondary institutions, college applications, gender, and methodological modifications.

### **Social Networks**

This study used a modified model of Perna's (2006) proposed conceptual model of college choice to examine the role of social networks on Latina/o students' college choice process. While this relatively new theoretical framework has been tested on limited research (Bergerson, 2009), it was relevant for social networks because it incorporates ideas of social capital (e.g., information about college). While this study did find social networks to be influential in the search and choice stage of students' college choice process, future studies that use a different dataset need to be expanded on the number of social capital variables included.

The first variable that should be included in future studies is the actual expectations social networks have for students, as opposed to the student's perception of what they think those individuals desire for them to do after high school. More specifically, a mix method study would be more helpful in examining the expectations school counselors, teachers, friends, and parents have for Latina/o students and the reasons why. This information will provide further explanation for the expectations social networks have for that particular student. Although it may be more time-consuming and expensive, this type of study may be more informative and helpful for

quantitative data. Additional research (i.e., qualitative and quantitative) should also examine the level of influence social networks have on the college choice process of students of various backgrounds in order to observe any similarities or differences across different racial groups.

The second area that needs further exploration relates to the term 'social network.' While past research studies refers to social capital as the ability of social networks to facilitate educational advancement for students (Bourdieu, 1986; Stanto-Salazar, 2004), a clearer definition for such individuals should be clarified. For example, in this study social networks refer to those individuals who impact Latina/o students' college choice process. However, many may confuse the term social network with social media via internet. Whereas terms such as, institutional gatekeepers and educational agents, are not inclusive of parents or friends. Therefore, future studies should consider using a more inclusive, yet specific term, that pertains to the exchange of information, resources, and support from social networks towards students' college choice process.

### **Gender, College Type, and College Applications**

The additional variables that were found the most significant towards Latina/o students' college choice process was gender, the type of postsecondary institution students planned to enroll in, and the number of college applications they submitted. While there is an abundance of research that has examined Latina/o students' gender differences in reference to college aspirations, college enrollment, and college graduation rates (Zarate & Gallimore, 2005; King, 2006), more studies should exclusively focus on Latina/o students' gender difference in relations to the college choice process (Saenz & Ponjuan, 2009). Secondly, the type of institutions students

aspired to attend should be further examined in relation to students' college choice process and enrollment. Especially, since this was the only variable to be significant across all five models and due to Latina/o students high aspirations to attend either a two-year college or vocational school. This is problematic because several studies have shown that Latina/o students' enrollment at a community college decreases their chances of earning a bachelor's degree (Admon, 2006; Laden, 2004). However, limited research has examined Latina/o students' aspiration to attend vocational schools. Thus, researching when and why Latina/o students are more likely to aspire to attend a vocational or two-year college will provided helpful insight of what is impacting these aspirations. Especially, since over half (59%) of the Latina/o students in this sampe planned to attend a vocational-technical-trade school versus only 5% who planned to attend a four-year college/university.

Moreover, the number of college applications students' submitted was found significant across all but one model. This variable should be further study, exclusively or in correlation to other related variables, in order to better understand how college applications impact students' college choice process. Specifically, in relations to family income, college awareness, academic preparation, and college readiness.

### **Methodological Modifications**

The final area to be discussed will address some methodological modifications that could strengthen this study and provide more robust insights regarding the college choice process of Latina/o students. Every study inherently has limitations as a result of the data being used and the knowledge of the researcher, but exploring ways to minimize these limitations will improve results and provide more accurate assessments of the problem under study. For future studies on the college choice process of Latina/o

students, there are two methodological modifications that should be considered: survey used and type of data.

First, this study used the ELS:02 dataset and was subsequently limited to the questions included in the survey. While the ELS:02 dataset includes surveys administered to students, parents, administrators, and school librarians, the questions included in the survey were not developed to study Latina/o students' college choice process. Future studies should consider using an alternative survey or developing one that is focused on the nuances that have emerged from previous studies on first-generation and Latina/o students. The ELS:02 dataset was an effective survey for this study but a more robust study that focused on social networks' influence on students' college choice process would be more suitable and may provide more insights into this topic. Also, this dataset was accessible to the public. Had I requested a license version of this dataset additional variables and information would have been provided and manipulated and controlled for. Thus, the unlicensed dataset was prone to biasness from the statisticians who created the public version of ELS:02.

As previously noted, using quantitative data is the norm when examining college choice and college enrollment (L. Perna, 2006), but by only incorporating quantitative data the results may exclude the other half of the story. There is a dearth of evidence on the college choice process of first-generation Latina/o students (Gofen, 2009; Thayer, 2000), particularly on why some Latina/os are successful in navigating the college choice process while others are not. Further research should focus on the reasons why some Latina/o students choose to pursue a college education, along with the methods they use to successfully navigate the college choice process. To examine these areas,

qualitative research may be best suited to gain this background information and the results can be later translated into a more appropriate quantitative methodology.

### **Closing Words**

Chapter 6 further explores specific findings from this study in collaboration to future recommendations and research. Specifically, the role of demographic characteristics, cultural and social capital, supply of resources, expected cost, and school context were examined to determine their role on Latina/o students' college choice process and enrollment. With approximately one third of all children who are enrolled in secondary school come from households where the parents don't have first-hand experience of the college choice process (Aud et al., 2012), President Obama is urging more individuals to earn a postsecondary degree. For this to be made possible, additional policies and programs must be put in place within secondary schools.

Therefore, I recommended a state and district policy to mandate high schools to develop a college preparation program so more Latina/o students can learn about the steps needed to enroll in postsecondary institutions. This college preparation program should incorporate informational college prep courses, collegiate opportunities, college summits, and informative college sessions for parents. Additionally, I recommended a state and district policy to require community outreach and partnership between high schools and Spanish-language media outlets to share college information to the Hispanic community. Overall, these two recommendations will help to create a college going culture at both the high schools students attend and the communities they live in. Researchers should continue to fill the current gaps in the literature regarding Latina/o students' college choice process in order to assist practitioners and policymakers in developing these critical policies and programs. Future research studies should

examine the role of social networks, different type of postsecondary institutions, number of college applications and gender in relations to Latina/o students' college choice process since these four variables were the most significant in this study.

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## BIOGRAPHICAL SKETCH

Griselda Flores was born and raised in Pahokee, FL, a small town in Palm Beach County. She attended the University of Florida where she earned her Bachelor of Arts in sociology and women studies. Griselda went on to complete her Master of Art in Teaching, majoring in secondary social studies education and completed her internship at Clark Middle School. Immediately following, Griselda began her Ph.D. in higher education administration. Griselda is currently seeking employment at a postsecondary institution where she can work with first-generation and minority students.