ABSTRACT

Title of Document:	MEXICAN AMERICAN FIRST-GENERATION STUDENTS' PERCEPTIONS OF SIBLINGS AND ADDITIONAL FACTORS INFLUENCING THEIR COLLEGE CHOICE PROCESS
	Dora Elías McAllister, Ph.D., 2012
Directed By:	Associate Professor Sharon L. Fries-Britt, Department of Counseling, Higher Education, and Special Education
	Professor Alberto F. Cabrera, Department of Counseling, Higher Education, and Special Education

The purpose of this study was to understand the factors influencing the college choice process of Mexican American first-generation students who had an older sibling with college experience. While a considerable amount of research exists on factors influencing the college choice process of first-generation college students, and a few studies report on the process for Mexican American first-generation college students specifically, far less attention has been devoted to the college choice process of first-generation college students who come from families where an older sibling has already experienced the college choice process. The major research question and sub-question guiding this study were: How do Mexican American first-generation students who have an older sibling with college experience describe their college

choice process? What are some of the familial, social, and academic factors that Mexican American students identify as influences on their college choice process?

This study was based on a qualitative, descriptive, multiple case study design. The cases were 17 Mexican American first-generation students attending Arizona State University (ASU). Participants completed a questionnaire and participated in two individual interviews. Participants were first-time freshmen, Arizona residents, spring 2010 high school graduates, and enrolled at ASU in fall 2010 with continued enrollment in spring 2011. In addition, five participants had an older sibling with a bachelor's degree; three participants had an older sibling with an associate degree; eight participants had an older sibling enrolled at a university; and one participant had an older sibling who had completed some coursework at ASU but left before obtaining a degree.

The most important conclusions from this study were: (1) Parents and older siblings have the greatest influence on the predisposition stage; (2) during the search stage, students sought information and assistance from teachers, followed by older siblings and counselors; (3) the institutions that students considered for application and attendance were heavily influenced by older siblings; (4) an institution's distance from home had a great influence on where students applied and enrolled; (5) institutional type had a great influence on where students applied; and (6) cost and financial aid had a great impact on students' choice of college.

MEXICAN AMERICAN FIRST-GENERATION STUDENTS' PERCEPTIONS OF SIBLINGS AND ADDITIONAL FACTORS INFLUENCING THEIR COLLEGE CHOICE PROCESS

By

Dora Elías McAllister

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Advisory Committee:
Associate Professor Sharon L. Fries-Britt, Co-Chair
Professor Alberto F. Cabrera, Co-Chair
Professor Susan R. Komives
Associate Professor Hanne B. Mawhinney
Professor of Practice Carol S. Parham
Dr. Robert E. Waters, Jr.

Dedication

To the students who participated in this study, for telling me their stories. To my

"baby" brother and sister, Rey and Karen, the inspiration for this dissertation.

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Chapter 1: Introduction

Description of the Problem

More Latina/os are enrolling in college and earning degrees than ever before (Cook & Cordova, 2006; Perna, 2000). Between 2000 and 2008, Latina/o undergraduate student enrollment in degree-granting institutions rose 50%, from 1.4 million to 2.1 million (Snyder & Dillow, 2009, Table 226). In comparison, White student enrollment grew more slowly, rising 14%, from 9 million to 10.3 million (Snyder & Dillow, 2009, Table 226). Over the same period, the number of bachelor's degrees conferred upon Latina/os increased by 58%, from 78,000 bachelor's degrees conferred in academic year 2000-01 to 123,000 conferred in 2007-08 (Snyder & Dillow, 2009, Table 285). In contrast, the number of bachelor's degrees conferred upon Whites increased just 21%, from 927,000 to 1 million (Snyder & Dillow, 2009, Table 285).

Despite Latina/os' progress in college enrollment and bachelor's degree completion, a great deal of room for improvement remains. Data from the 2010 *Digest of Education Statistics* and the 2012 *Statistical Abstract of the United States* show that in 2009, Latina/os were underrepresented among both undergraduates (13%) (U.S. Department of Education [ED], Institute of Education Sciences [IES], & National Center for Education Statistics [NCES], 2010, Table 235) and bachelor's degree recipients (8%) (U.S. Census Bureau, 2012, Table 300) relative to their demographic representation among the traditional college-age population (17%) (U.S. Census Bureau, 2010b, Table 10).

The economic value of a college education to Latina/os cannot be underestimated. In 2009, the median household income for those with a bachelor's degree was $75,500

while high school graduates' median household income was $39,600 (U.S. Census Bureau, 2012, Table 692). Accordingly, Latina/o college graduates have the ability to earn a higher salary over a lifetime than those with a high school diploma. According to a report from the U.S. Census Bureau, a bachelor's degree is worth almost a million dollars more in lifetime earnings than a high school diploma (Julian & Kominski, 2011). In addition to the ability to earn a higher salary over a lifetime, education is also correlated with employment (Institute for Higher Education Policy, 2005). In February 2012, workers 25 and older with a bachelor's degree experienced a 4.4% unemployment rate, while those workers with just a high school diploma were twice as likely (9.2%) to be unemployed (U.S. Bureau of Labor Statistics, 2012). Clearly, there are substantial individual benefits that result from an investment in higher education.

An educated Latina/o workforce with higher earnings and a lower unemployment rate would also brings benefits to the United States as a whole. Latina/os are the largest and fastest-growing ethnic minority group in the U.S. - population projections data from the U.S. Census Bureau forecasts that by 2050, Latina/os will make up 30% of the U.S. population (U.S. Census Bureau, Population Division, 2008). A college-educated labor force that includes the participation of Latina/os is necessary for the growth of the U.S. domestic economy (Badger, 2010) and will assist the U.S. in competing in the global economy as well (Hispanic Alliance, 2010). Moreover, recent reports (J. Gonzalez, 2010; Santiago, 2011; ED, 2011) have concluded that Latina/o educational attainment is important to President Obama meeting his goal of having the U.S. leading the world in higher education degrees by 2020.

In its efforts to compete in the global economy, the United States continues to transition away from manufacturing jobs to a high-tech economy (Badger, 2010). At the same time, less than 20% of Latina/o workers are employed in high-tech occupations that require at least some college education (U.S. Bureau of Labor Statistics, 2009). The vast majority of Latina/os are currently concentrated in relatively low-skill occupations that require a minimal education (Kochhar, 2005). Taken together, the discrepancy between the low education and skills of the United State's largest ethnic minority group and the education and skills necessary for the U.S. work force to contribute to the United State's competitiveness in the global economy, suggests the need to increase Latina/os' college enrollment and graduation rates.

For many Latina/o students, however, college is not "simply the next, logical, expected . . . stage" (Terenzini et al., 1994, p. 62) after high school. The decision to enroll in college may represent a significant departure from their background and past experiences. Many of these students will be the first in their family to attend college. For these first-generation college students, enrolling in college often means exposure to new academic and social climates (Terenzini, et al.).

Nevertheless, given the value of a college education, it is not surprising that many Latina/os desire a college education. The Education Longitudinal Study of 2002 (ELS:2002) revealed that compared with other high school seniors, Latina/os were as likely (91%) as any other racial/ethnic groups (92%) to indicate that they planned to continue their education after high school (Chen, Wu, Tasoff, & Weko, 2010, Table 3). They were also as likely to report that they expected to attain "some college" (Chen et al., 2010, p. 3). However, the college enrollment rate for Latina/os suggests that simply

aspiring to attend and graduate from college is insufficient to guarantee college attendance. In October 2010, the college enrollment rate (60%) of Latina/os who graduated from high school between January and October 2010 was lower than for Asians (84%), Whites (67%), and Blacks (61%) (U.S. Bureau of Labor Statistics, 2011). This inconsistency between Latina/os' postsecondary plans and their actual behavior upon graduation from high school (Swail, Cabrera & Lee, 2005c) illustrates the need for studies that focus on understanding the factors that influence their postsecondary plans and behaviors.

Previous research (Bers, 2005; Bhagat, 2004; Burrell-McRae, 2009; Butner et al., 2001) has provided details and insights on the college choice process, the process through which students make decisions about whether and where to go to college (Bergerson, 2009a). Evidence suggests that not all students experience the college choice process in the same way (Glick & White, 2004; Hurtado, Inkelas, Briggs, & Rhee, 1997; Kim, 2004). Factors such as race, ethnicity and generational status may mediate college choice decisions and outcomes (Ceja, 2001; Hamrick & Stage, 2004; Hao & Bonstead-Bruns, 1998; P. A. Pérez, 2007). One way to begin addressing the low college enrollment rate of Latina/o students is to examine how these students make decisions about college. Peréz and McDonough (2008), for example, argue that "in further identifying how Latinos come to formulate postsecondary plans and navigate their college choice decisions, we can enhance their educational opportunities" (p. 250). While the Peréz and McDonough study focused on Latina/o high-achieving California high school students and contributes to our understanding of the college choice process among first-generation students, we are still left to wonder if the process is the same for all Latina/o first-generation students.

More specifically, this study focused on this process for the largest Latina/o population in the United States and in higher education, Mexican Americans. In an effort to identify and understand factors contributing to their college enrollment, this study examined the process that Latina/o first-generation college students experienced when making decisions about college.

Purpose of the Study

The purpose of this study was to understand the factors influencing the college choice process of Mexican American first-generation students who had an older sibling with college experience. The major research question and sub-question guiding this study were:

1. How do Mexican American first-generation students who have an older sibling with college experience describe their college choice process?

    a. What are some of the familial, social, and academic factors that Mexican American students identify as influences on their college choice process?

While a considerable amount of research exists on factors influencing the college choice process of first-generation college students and a few studies report on the process for Mexican American first-generation college students specifically, far less attention has been devoted to the college choice process of first-generation college students who come from families where an older sibling has already experienced the college choice process.

The value of having an older sibling with college experience for Latina/os has been documented in earlier studies (Attinasi, 1989; Gomez, 2005; M. T. Hurtado, 1997; Wolf, 2007). The literature also suggests that older siblings with college experience, regardless of race or ethnicity, may contribute to the development of students' career and

educational aspirations and the intentions to continue education beyond high school (Butner et al., 2001; Ceja, 2006). At the same time, other research has found that only Mexican American students with older brothers in college are more likely to attend college (S. Hurtado et al., 1997) or that White older siblings in college simply reinforce predispositions that already exist (Kaczynski, 2011). Nevertheless, Mexican American first-generation college students who are not the first in their family to attend college represent a select subgroup of students whose first-hand knowledge of college attendance via an older sibling places them in a different group than first-generation students who come from families where there is no history of college attendance. For instance, students who have an older sibling with college experience may have available within the family context the information and assistance necessary to make decisions about college. This may not be the case for students who will be the first in their family to attend college. Hence, this study is the first with a particular focus on the college choice process of Mexican American first-generation college students who had a sibling attend college before them.

Research Design

I used a qualitative methodology to examine the college choice process of Mexican American first-generation college students who had an older sibling with college experience. For data collection I used individual, semi-structured interviews as the primary data collection technique. I asked participants about their experiences during the college choice process and to identify the factors they perceived contributed to their decision to attend college, search for information about college, complete applications, and choose an institution for enrollment.

One reason I selected a qualitative research design was to provide a voice for individuals not heard in the literature (Creswell, 2007). Quantitative studies have already identified factors and variables that contribute to the college choice process. Nonetheless, students' stories can provide qualitative data that can further illuminate how these factors and variables affect students' college choice process. Mexican American students' voices are needed to understand how they make sense of their college choice process and qualitative research puts participants' voices in a primary position. A qualitative research design provided students with an opportunity to tell their college choice process stories while highlighting the presence or absence of the information and assistance necessary to make decisions about college.

I used a descriptive case study design to address the research questions. A primary strength of the descriptive case study method is its ability to generate a rich, thick and detailed account of a case that conveys understanding and explanation of a phenomenon (Merriam, 1998). As such, Merriam maintains: "Perhaps the major point about case studies to keep in mind is that they are "'richly descriptive in order to afford the reader the vicarious experience of having been there'" (p. 238). The goal of this study was to gain this level of understanding and explanation of Mexican American first-generation college students and their college choice process. Thus, a descriptive case study design constituted an appropriate match between the research focus and the research method.

This study employed a multiple case study design, meaning that it included more than one case (Merriam, 1998). Each student was considered a unit of analysis, or case, in the current study. In multiple case studies, there are two stages of data analysis – the

within-case analysis, in which each case is first treated as a complete case in and of itself, and the cross-case analysis, in which the researcher seeks to build generalizations across the cases (Merriam, 1998). For that reason, chapter four presents the findings first as individual profiles (or case studies) (Merriam, 2009), then chapter five offers a cross-case analysis and interpretation that provides a general explanation about the college choice process of Mexican American first-generation college students

The study followed Merriam's (2009) outline for a qualitative research study design: selecting a research topic, identifying a research problem, identifying a theoretical framework, reviewing the literature and selecting the sample. In this study, the research topic is the college choice process of Mexican American first-generation college students. According to the literature, the problem is that, except for Native American students, Latina/o high school graduates enroll in college at lower rates than all other U.S. racial/ethnic groups (Cook & Córdova, 2006). Furthermore, Mexican American students have the second lowest rate of college attendance of any Latina/o national origin group (Fry, 2002). The literature indicates that the lower college enrollment rates of Latina/os and Mexican Americans may be influenced by a number of factors, including family background characteristics, peers and schools (Hossler, Schmit, & Vesper, 1999).

I identified and established the theoretical frameworks by reviewing the relevant literature (Merriam, 2009). Each framework included relevant factors identified in the literature as influencing the college choice process. The two frameworks were: Hossler & Gallagher's (1987) three phase model of college choice and Perna's (2006) proposed conceptual model of student college choice. Hossler and Gallagher's model is a student-

centered model that proposes a process in which factors such as student and school characteristics, significant others, and educational activities act together to shape the decisions students make during the college choice process (Hossler & Gallagher, 1987). This model was useful as it simplified the presentation of the college choice process into three stages. However, the model has been criticized because it assumes that all students have equal access to information about college (Bergerson, 2009b). For this reason, some researchers have said it does not fully explain the college choice process of students who cannot access some information sources (e.g., low socioeconomic students, students of color, first generation students) (Bergerson, 2009b; A. F. Cabrera & La Nasa, 2001; Talavera-Bustillos, 1998). To address this criticism, I chose to enhance Hossler and Gallagher's model by incorporating Perna's (2006) proposed conceptual model of student college choice.

Perna's (2006) model acknowledges that not all students have equitable access to the information and resources necessary for engaging in the college choice process (Bergerson, 2009b). The model proposes four layered contexts which influence the college choice process: (1) an individual's habitus; (2) a school and community context; (3) a higher education context; and (4) a social, economic and policy context. I used this expanded model to explore familial, social, and academic variables identified in the literature as having a potential impact on the college choice process of Mexican American first-generation students. Nevertheless, rather than using all layers of Perna's model to examine the college choice process, only those elements identified in the literature as relevant to Mexican American students informed this study. Specifically, I incorporated elements from two of the model's contextual layers, the individual's habitus

and the school and community context, into this study. Based on my review of the literature on the college choice process of Mexican American students, I concluded that the variables cultural capital and social capital from the habitus layer and the school context from the school and community layer were relevant to this study.

Both Hossler and Gallagher's (1987) and Perna's (2006) models helped describe the college choice process of Mexican American first-generation students. The models are examined in detail in chapter two and segments of the models are further detailed in the description of the data analysis procedures in chapter three.

In keeping with Merriam's (2009) research design for a qualitative research study (selecting a research topic, identifying a research problem, identifying a theoretical framework, reviewing the literature and selecting the sample), I present a discussion of previous relevant literature in chapter two. This literature review integrates, synthesizes, and critiques the important thinking and research (Merriam, 2009) related to the college choice process of Mexican American students. After a thorough review of the relevant literature, chapter three outlines the task of selecting the units of analysis, or cases.

Significance of the Study

While we know that students with siblings who are attending college are more likely to have college aspirations and that having an older sibling enrolled in college exerts a strong influence on the educational planning of students (Hossler, Braxton, & Coopersmith, 1996; Hossler, et al., 1999), we do not necessarily know why, nor do we know how, an older sibling with college experience may be affecting the college choice process. The notion that having a sibling with college experience is beneficial for the college choice process has already been established in prior research (Ceja, 2006; Cohen,

2009; M. T. Hurtado, 1997; P. A. Pérez, 2007; Talavera-Bustillos, 1998). What is lacking, and what the current study provides, are detailed perspectives of the college choice process of first-generation college students who come from families with a history of higher education via an older sibling with college experience.

Providing detailed perspectives of the college choice process of students who come from families with a history of higher education via an older sibling with college experience is particularly important for Latina/o students, whose parents are less likely to have completed college (Esprivalo Harrell & Forney, 2003). Since many Latina/o parents have not had the opportunity to experience the college choice process themselves, parents may become more familiar with the college choice process via an older sibling with college experience. An older sibling with college experience may expose parents to some aspects of the college choice process that can lead to parents become more involved in their younger children's college choice process. It is unlikely that parents who have not experienced the college choice process themselves will understand all aspects of the complex path leading to college enrollment. Still, previous research has found that older siblings can be an important source of information during the college choice process (Ceja, 2006).

In addition to a focus on first-generation students who had an older sibling with college experience, this study focused on Mexican American students who began college at a four-year university. Mexican Americans are underrepresented at four-year colleges (Snyder & Dillow, 2009, Table 227), suggesting the need for research that increases our understanding of Mexican Americans who choose four-year colleges. This understanding can lead to policies and practices that increase the proportion of Mexican

Americans that enroll in four-year colleges directly from high school. Furthermore, the research shows that many Latina/os that enroll in four-year colleges have encountered significant difficulties on their path to college – and that these challenges do not end once they enroll (Benitez, 1998; Faye Carter, 2006). Understanding Mexican American's path to a four-year university may lead to a new understanding of the challenges that many Latina/o college students at four-year universities encounter.

Definition of Key Terms

Different terms are used in the literature that examines the college choice process of Mexican American first-generations students. Some of these terms are interchangeable, while others are not. Therefore, the following terms are defined so that the reader can clearly understand their meaning as they related to this research study.

College choice process. The term "college choice process" refers to the process through which students make decisions about whether and where to go to college. This study used Hossler and Gallagher's (1987) three phase model of college choice to simplify the presentation of the college choice process. The model categorizes 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 specific institutions; and (3) *choice,* completing applications and choosing an institution for enrollment (A. F. Cabrera & La Nasa, 2000a; Hossler et al., 1999).

First-generation student. Some studies that focus on the college choice process of first-generation students define "first-generation" as undergraduates whose parents never enrolled in postsecondary education (Nunez & Cuccaro-Alamin, 1998; Pascarella, Pierson, Wolniak, & Terenzini, 2004; Pryor et al., 2006). Other studies define first-

generation as a student whose parents have never earned a bachelor's degree but have some postsecondary experience (Engle & Tinto, 2008; Mendez, 2003). Still others define first-generation as a student whose parents have not gone to college and who have no older siblings who went to college before them (Rooney, 2008; Talavera-Bustillos, 1998). For the purpose of this study, the term first-generation student means a student whose parents never enrolled in college as a degree-seeking student.

Latina/o. The term "Latina/o" is used most frequently in this study as a matter of personal preference. "Latina" is a term used to refer to a female of Latin American descent living in the United States. The definition of "Latino" is a male or female of Latin American descent living in the United States. The term "Latina/o" is gender inclusive. The U.S. government categorizes Latina/os into Mexican, Mexican-American, Chicano; Puerto Rican; Cuban; and another Hispanic, Latino or Spanish origin. Examples provided by the U.S. government as "another Hispanic, Latino or Spanish origin" include Argentinean, Columbian, Dominican, Nicaraguan, Salvadoran and Spaniard (U.S. Census Bureau, 2010a). When reporting data about Latina/os, government reports often use the term "Hispanic" (Crissey, 2007; "Hispanic Americans" 2007; U.S. Census Bureau, Population Division, n.d.). The research site for this study also uses the term "Hispanic" for reporting purposes (Arizona State University [ASU], 2008).

Mexican American. The term "Mexican American" is used most frequently in this study also as a matter of personal preference. The term is often used to describe an individual whose country of origin is Mexico. Other terms found in the literature are *Chicano, Chicana,* and *Chicana/o,* terms that typically refer to United States-born

citizens of Mexican descent. The terms Chicano and Chicana were widely used by

Mexican Americans during the Chicano Civil Rights Movement of the 1960s. In the

higher education literature, the terms are more often seen before 2000 (Gandara, 1995;

Gloria, 1993; Gándara, 1986; Post, 1990; Talavera-Bustillos, 1998).   Albeit not as

prevalent, the terms Chicano and Chicana are still in use today by some researchers

(Ceja, 2006; P. A. Pérez, 2007). The terms Mexican American, Chicano, Chicana,

Chicana/o, and Chicano/a group together immigrants to the United States, children and

grandchildren of immigrants and people who have lived in the United States for

generations.   Study participants self-identified as Mexican American by selecting "Yes,

Mexican, Mexican American, Chicano" to the question "Are you of Latino, Latina or

Spanish origin?" in the Participant Preliminary Questionnaire (Appendix B).

 Older sibling with college experience. "Older sibling with college experience"

means that the student had at least one older sibling who attended or was attending a

college as a degree-seeking student at the time of the interview. Because this study

focused on students with an older sibling with college experience, unless otherwise noted,

hereafter I will refer to older siblings with college experience as "older siblings."

Chapter 2: Review of the Literature

A growing body of research investigating the process that Latina/o students undergo when making decisions about college exists (Ceja, 2006; Cohen, 2009; Hurtado-Ortiz & Gauvain, 2007; P. A. Pérez & McDonough, 2008; Rooney, 2008). Yet, very few researchers have focused on examining those factors that promote enrollment of Latina/o students in four-year colleges. Learning more about this subject is important, as Latina/o students hold high expectations for bachelor's degree completion (Cahalan, Ingels, Burns, Planty, & Daniel, 2006, Figure 17; Chen et al., 2010, Table 1; Noeth & Wimberly, 2002), but over half (55%) of Latina/os begin their postsecondary education at a community college (Adelman, Daniel, & Berkovits, 2003) and students who start at a community college are significantly less likely to obtain a bachelor's degree (Admon, 2006; Benítez & DeAro, 2004; Laden, 2004).

Encouraging Latina/o students to enroll in four-year colleges directly upon completing high school is desirable in light of the overall benefits of a bachelor's degree over the life time of the individual. First, the wage premium of those who have earned a bachelor's degree is higher when compared to those who have not. The median annual income for a full-time, year round worker with a bachelor's degree is $57,026, compared to $40,556 for those with some college but no degree (Julian & Kominski, 2011). Second, having a bachelor's degree is increasingly an essential job requirement. For instance, of the 20 fastest growing occupations, eight require a bachelor's degree or higher (U.S. Bureau of Labor Statistics, 2009, Table 1). Third, a greater amount of bachelor's degree recipients is essential to the United States' global competitiveness.

Accordingly, there is growing concern that other countries will surpass the United States in the proportion of their population earning a bachelor's degree (Adelman, 2009).

This chapter is divided into three parts. The first part provides an overview of the characteristics of Mexican Americans, Mexican American undergraduates and first-generation college students. The overview of Mexican Americans and Mexican American undergraduates includes studies concerned with the habitus (i.e. demographic characteristics, cultural capital and social capital) of these two groups because one of the theoretical frameworks of this study, Perna's proposed conceptual model of student college choice, assumes that students' habitus shapes their college choice process. The second part of this chapter reviews the literature related to the college choice process, with a focus on studies related to the college choice process for Mexican American students. This part begins with a review of the key college choice models that have shaped current research. The third part of this chapter provides a brief overview of relevant conclusions from the sibling literature. The chapter ends with a review of the theoretical frameworks of the study.

Although the focus of this study is Mexican American undergraduates, studies that used the broad terms of "Latino," "Latina/o" or "Hispanic" are referenced in the overview of the characteristics of Mexican Americans and Mexican American undergraduates as well as in the review of the studies related to the college choice process of Mexican American students. Expanding the literature review in this way is justified because approximately 70% of the U.S. Latino population is of Mexican origin (Ramirez & de la Cruz, 2002). Therefore, it is reasonable to conclude that, unless otherwise noted, studies that use the broad terms of Latino, Latina/o or Hispanic likely

include a large sample of Mexican Americans (see, for example, L. X. Pérez, 1999). Although the population under investigation attended a four-year university, studies that focused on the college choice process of Latina/o students at community colleges are also included because research that focuses on the college choice process of Mexican American students who choose to enroll in four-year colleges is limited. Hence, this study which focuses on Mexican American first generation students adds to the dearth of that literature.

Characteristics of Mexican Americans

To understand Mexican American students and the choices they make about college, it is first essential to discuss who they are and their place in American society. This discussion is accomplished by providing a description of Mexican Americans' immigration, socioeconomic and language contexts and how these contexts may shape students' college choice process. Without knowledge of these contexts, practitioners and policymakers are poorly informed about Mexican American students. The potential results are inadequately informed outreach, recruitment, and admissions programs.

Among the characteristics of Mexican Americans that may influence the college choice process are: immigration, social and cultural capital, socioeconomic status (SES) and language proficiency. Because the modern-day states of Arizona, Colorado, California, New Mexico, and Texas were acquired by the United States from Mexico, Mexican Americans have lived in the United States for generations. However, the majority (58%) of Mexico-born Mexican Americans arrived in the U.S. in 1990 or later, with about 37% arriving between 1990 and 1999 (U.S. Census Bureau, 2007). According to Portes and Rumbaut (2006), Mexican immigration began in the early 20th century, a

result of Mexican refugees fleeing the Mexican Revolution and U.S. growers and railroad companies recruiting workers from Mexico. Today, Mexican immigrants account for approximately 20% of total immigration to the U.S. (Portes & Rumbaut, 2006).

Mexican immigrants consist overwhelmingly of manual laborers who arrive in the United States unskilled and with low levels of schooling (Portes & Rumbaut, 2006). As a result, their children frequently experience serious barriers (Portes & Rumbaut, 2006). For example, Portes and Rumbaut concluded that the characteristics of Mexican immigrants' education and occupational statuses play a significant negative role in the academic performance and overall educational attainment of their children.

In the U.S. since 2000, more of the Latina/o population increase has been a result of births over deaths of existing residents (60%) than immigration (40%) (Fry, 2008). Despite this reversal of past trends, higher rates of immigration mean that most Latina/os are close to the immigration experience, even if they are not immigrants themselves (Pew Hispanic Center, 2009; Zwick & Sklar, 2005). In other words, although most (88%) of Latina/o undergraduates are U.S.-born citizens (Santiago, 2007), many are likely children of recent immigrants. This recent experience with immigration may limit their opportunities to pursue postsecondary education. Immigrants, or children of immigrants, for example, may lack the social and cultural capital necessary to know about the value of college and the postsecondary admissions process (McDonough, 1997).

A number of researchers (Ganderton & Santos, 1995; Glick & White, 2004; Hagy & Staniec, 2002) have looked at the relationship between immigrant generation status and participation in postsecondary education among Latina/os. In general, researchers have found that U.S.-born children of Latina/os attend college at higher rates than do

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Latina/o immigrants (Feliciano, 2005, Table 4; Rong & Grant, 1992, Table 1; The Washington Post, 2009). However, researchers suggest that college attendance for Latina/os does not increase with successive generations of U.S. residence (Hagy & Staniec, 2002, Table 1; Rong & Grant, 1992). For example, Rong and Grant found that Latina/o immigrants complete four years of college at a lower rate than first-generation Latina/os (U.S.-born Latina/os with one or more non-U.S.-born parent). However, second-generation Latina/os (U.S.-born Latina/os whose parents were also U.S.-born) complete college at a lower rate than first-generation Latina/os.

In addition to immigration status, social and cultural capital are also important factors influencing postsecondary choices among Latina/os (Ceja, 2006; Cohen, 2009). Although some researchers use these terms interchangeably, students acquires social capital through their relationships with others, particularly through membership in social networks and structures (Perna, 2006). Perna suggested that a primary function of social capital is to enable a student to gain access to other forms of capital, such as cultural capital, as well as institutional resources and support. Cultural capital, on the other hand, refers to general characteristics, skills, knowledge, and traits that are derived, in part, from one's parents and that define an individual's class status (Perna, 2006)

As an example, having information in the home about college indicates a form of social capital that may promote college enrollment (Perna, 2006). At the same time, knowledge about higher education may indicate the possession of the cultural capital necessary for college enrollment (Perna, 2006). Some researchers have suggested that the college decisions of Latina/os are limited because they lack the type of social and cultural capital valued in the college choice process (Perna, 2000; Perna & Titus, 2005).

In particular, González, Stoner, and Jovel (2003) noted that most of the parents in their study of 22 Latina students "did not possess the capacity to provide privileged information about college or access to opportunities for social mobility" (p. 154), two indicators of the social capital necessary to "acquire the opportunity to attend college" (p. 154).

If the most valued kinds of cultural and social capital are possessed by members of the upper class (Bourdieu & Passeron, 1990), SES must be considered when discussing the social and cultural capital (Coleman, 1988; McDonough, 1997) of Mexican Americans. For instance, Ganderton and Santos (1995) found that an increase in SES (as measured by combining father's occupation, parent's education, income, and household possessions) increases the probability of attending college for Latina/os. Further evidence of the impact of SES comes from Swail, Cabrera, Lee and Williams' (2005a, 2005b, 2005c) three-part series on Latina/o students in the educational pipeline. In their report of the differences between Latina/o and White students for those who completed a bachelor's degree and other levels of education, family income was determined to be a major predictor of educational attainment among Latina/o students (Swail et al., 2005b). In their report, "Pathways to the Bachelor's Degree for Latino Students," SES had a significant impact on postsecondary degree completion (Swail et al., 2005c). Taken together, these studies provide evidence for a positive relationship between SES, cultural and social capital, college attendance, and degree completion.

If SES, usually measured by parental income (Hearn, 1991; Hofferth, Boisjoly, & Duncan, 1998) or by a constructed measure that includes parental income and education (A. F. Cabrera & La Nasa, 2000b; Jasinski, 2000; Kurlaender, 2006), plays a role in

Latina/o students' college attendance rate, then Mexican Americans may be at a disadvantage. In terms of income, Mexican Americans are more likely than the U.S. general population to be financially disadvantaged. The Pew Hispanic Center (2010), using data from the 2008 American Community Survey, found that the median annual earnings for Mexican Americans were $20,368, well below the median earnings for the overall U.S. population ($29,533). Furthermore, this Pew report found that Mexican Americans have a lower level of education than the overall U.S. population. The highest level of education for most Mexican Americans age 25 and older is less than a high school diploma, while the highest level of education for most of the overall U.S. population is some college.

Another explanation in the literature for the lower Latina/o postsecondary participation rate is that a majority of Latina/o students and their parents struggle with the English language. The literature encompasses three primary explanations on how a struggle with English impacts the college choice process. First, some researchers have argued that since Latina/o students do not speak English well they perform poorly on standardized tests (Altshuler & Schmautz, 2006; Pennock-Román, 1990). Second, other researchers have speculated that this poor performance may discourage Latina/os from continuing education beyond high school since poor scores on standardized tests may decrease the likelihood of college admission ("The use of," 2009; Zarate & Gallimore, 2005). A third explanation is that parents who do not speak English may be unable to assist their children with decisions regarding their college education or communicate with high school or college personnel regarding information about college (Ceja, 2006; Hurtado-Ortiz & Gauvain, 2007). Still, other research suggests that lack of English

proficiency is not the reason for the low college attendance rate of Mexican Americans (Pew Hispanic Center, 2010). Recently, the Pew Hispanic Center found that 62% of Mexican Americans ages five and older reported speaking only English at home or speaking English very well.

Characteristics of Mexican American Undergraduates

This general overview of the characteristics of Mexican American undergraduates focuses on some of the elements that may help or hinder the college choice process. It is important to note, however, that there are significant differences among Mexican American college students, a group that will be explored in further detail through the examination of their college choice process. The intent of this overview is not to capture the differences between Mexican American subpopulations, for example, U.S-born versus Mexico-born students. This overview is simply an attempt to provide a broad summary of all Mexican American undergraduate students.

Demographic Characteristics. While there is substantial diversity among Mexican American undergraduates, the typical Mexican American college student can be described as: U.S.-born, female, non-traditional age, and low-income. Among Latina/os, almost half of undergraduates are Mexican American (48%) (Santiago, 2007). For this reason, some researchers have focused their college choice studies solely on Mexican American students (Ceja, 2006; Cohen, 2009; Gomez, 2005; M. T. Hurtado, 1997; Pérez & McDonough, 2008; Talavera-Bustillos, 1998). Yet, research studies focusing exclusively on Mexican American students constitute less than a quarter of the Latina/o college choice studies. Additional research detailing the college choice process is necessary to provide added insight into the ways this large Latina/o population makes

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decisions about college.

Recent media coverage of the DREAM Act (Mack, 2011; Navarrette, 2010; Perez, 2010) has limited the dialogue about Latina/os in higher education to undocumented students. This proposed federal legislation would provide some undocumented students with the opportunity to go to college. Although heavily covered by the media, undocumented students make up a very small portion of Latina/o undergraduates. The majority (88%) of Latina/o undergraduates are U.S.-born citizens; another 11% are legal residents (Santiago, 2007). While addressing undocumented students in research is important, this study will not address this undergraduate population. Nonetheless, as explained in the following chapter, participants were not asked about their U.S. citizenship or residency status.

In addition to being U.S.-born, the typical Mexican American college student is female. While both Latino and Latina enrollment has increased, Latina enrollment has increased more rapidly (Santiago, 2008). As a result, in 2009 Latinas represented 58% of all Latina/os in higher education (ED, IES, & NCES, 2010, Table 235). To date, there are few studies that focus on the college decision-making process among Latinas (Butner et al., 2001; Ceja, 2006; Talavera-Bustillos, 1998). Of these, two focus specifically on the Chicana college choice process (Ceja, 2001; Talavera-Bustillos, 1998). These studies considered how gender influenced the college choice process for female students. Ceja (2001) examined the college choice process and destinations of first-generation Chicanas enrolled at a large urban high school. All of the Chicanas in Ceja's study "for whom leaving home was perceived to be an issue, were convinced that there were some gender. . . dimensions explaining why their parents wanted them to stay home and not leave

home to go to college" (Ceja, 2001, p. 154). Similarly, Talavera-Bustillos discussed gender issues among first-generation Chicanas, noting that they confronted expectations of staying home and raising a family. While Ceja, Talavera-Bustillos and other scholars (Contreras-Godfrey, 2009; Zarate & Gallimore, 2005) suggest that men and women experience the college choice process differently, others have reported that gender has little or no effect on the college decision-making process (Hearn, 1991; Paulsen, 1990).

Despite increases in the number of recent Latina/o high school completers who enroll in college (Snyder & Dillow, 2009, Table 201), the typical Latina/o college student is older than his or her peers. Nearly 40% of all college students are 18 to 24 years old, the traditional age group for college attendance (Snyder & Dillow, 2009, Table 204). In comparison, only 37% of 18- to 24- year old Latino high school completers are enrolled in college (Snyder & Dillow, 2009, Table 204). The attendance rate is 50% for traditional age White college students and 40% for African Americans (Snyder & Dillow, 2009, Table 204). Moreover, 7% of Latina/o college students are non-traditional students, meaning they are older than 24, compared to 5% of Whites (Fry & & ERIC Clearinghouse on Urban Education, N. Y., 2003).

A strong case can be made for the advantages of enrolling in college at an age that makes it likely that a student will graduate with a bachelor's degree by the age of 24. Delaying college enrollment a year or more after high school graduation places students at greater risk of not completing a bachelor's degree (Horn, Cataldi, & Sikora, 2006). For example, Horn et al. (2006) found that 56% of undergraduates who delayed their college enrollment enrolled in community colleges. In comparison, just 34% of undergraduates who enrolled immediately after high school enrolled in community

colleges (Horn et al., 2006) and enrolling in a community college decreases the chance of earning a bachelor's degree (Admon, 2006; Benítez & DeAro, 2004; Laden, 2004). They caution against comparing outcomes of students who delay their college enrollment with those who attend college right after high school, arguing that the two groups differ in many respects. Accordingly, some college choice studies have been careful to include only traditional-age students who entered college directly from high school (Bers, 2005; Rooney, 2008).

Lastly, the typical Mexican American undergraduate has a low-income background. Higher proportions of dependent Latina/o students come from families with lower incomes, compared to all undergraduates (Santiago, 2007). (Dependent students are required to provide parental information or a parent's signature on the Free Application for Federal Student Aid (FAFSA) [Federal Student Aid, 2010]). In 2003-04, almost 25% of dependent Latina/os had incomes under $40,000, compared to about 21% of all undergraduates (Santiago & Cunningham, 2005). To add to our understanding of the college choice process of low-income Latina/os, several researchers have limited their college choice studies to low-income Latina/o students (Collatos, Morrell, Alejandro, & Lara, 2004; González et al., 2003; Oliverez, 2006; Rooney, 2008; Talavera-Bustillos, 1998). To be sure, there exists value in better understanding the college choice process of low-income Latina/os. Despite this common factor, when considering the factors that influence the college choice process, factors other than parents' income make a greater difference in the college decision-making process (A. F. Cabrera & La Nasa, 2000b; McDonough, 1997).

College Enrollment Behaviors. Profiling Mexican American undergraduates requires an understanding not only of demographic characteristics, but also of college enrollment behaviors. Given the distinctive characteristics of Latina/o college enrollment in comparison to other students (Fry, 2002; Santiago, 2007), it is essential to highlight their college enrollment behaviors. This description of the college attendance behaviors of Latina/os examines the shares of Latina/os enrolled in college who are studying part-time versus full-time and who are in two-year versus four-year institutions.

Among undergraduate students, Latina/o students are the least likely to be enrolled in college full-time. Data from the U.S. Department of Education (ED, IES, & NCES, 2010, Table 235) reveal that in 2009 approximately 47% of Latina/os were enrolled in college part-time. The data also indicated that Latina/os were enrolled part-time in college at higher percentages than Whites (37%), Blacks (40%), Asian/Pacific Islanders (37%), and American Indian/Alaska Natives (39%). Some researchers (Fry, 2002; Nora & Rendon, 1990) have suggested that Latina/os enroll in college part-time because they work to help financially support their families. In addition, others researchers (Hearn, 1992; Terenzini & Pascarella, 1998) have argued that those who pursue part-time attendance differ from those that attend full-time. For example, Hearn found that students from lower SES backgrounds were more likely to have enrolled part-time.

Despite findings that suggest that Latina/os who enroll in college part-time differ from those who attend full-time, the limited body of literature on the college choice process of Latina/o students tends to focus on the ability of Latina/os to successfully navigate the college choice process (see, for example, Contreras-Godfrey, 2009;

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Talavera-Bustillos, 1998) and does not make distinctions by enrollment status. In other words, these studies define college choice success in terms of college enrollment in any college without any consideration to course load once the student is enrolled.

Nearly 46% of 18- to 24-year-old Latina/o students are enrolled in two-year institutions (Fry, 2012). In comparison, only 27% of Whites, 37% of Blacks, and 22% of Asian Americans are enrolled in two-year institutions (Fry, 2012). Moreover, among Latina/os, Mexican Americans have the highest percentage of undergraduates studying at community colleges upon completion of high school (Swail, Cabrera & Lee, 2005). The two-year college attendance rate for Mexican American undergraduates in 2000 was almost 50% (Fry, 2002), while the rates for Puerto Ricans and Cubans each was 31% (Torres, 2004).

Some researchers have asserted that SES status (Kao & Thompson, 2003; O'Connor, Hammack, & Scott, 2010) and less access to social capital (Admon, 2006) play a role in Latina/os' high rate of enrollment in two-year colleges. In general, tuition is lower at community colleges than at four-year colleges. This feature of community colleges would understandably attract students from low-income backgrounds. All the same, among Latina/o students, SES alone may not explain the higher rate of enrollment in two year institutions. Admon, for example, found that low-SES Latina/os were more likely to attend a two-year school than low-SES African Americans or Whites. Admon suggested that the type of social capital possessed by Latina/o immigrants resulted in a lack of information about college costs and financial aid that, in turn, resulted in Latina/os applying to community colleges at higher rates than Whites or African Americans.

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Firsthand accounts of the college choice process of Latina/os enrolled at four-year colleges have been limited (Butner et al., 2001; Cohen, 2009; Contreras-Godfrey, 2009; González et al., 2003; Oliverez, 2006; P. A. Pérez, 2007; Rooney, 2008). Most Latina/o college choice research is focused on the college choice process during high school (Anderson, 2008; Carreras, 1998; Ceja, 2001; Collatos et al., 2004; Cooper, Cooper, Azmitia, Chavira, & Gullatt, 2002; Gomez, 2005; L. Gonzalez, 2007; Kao & Tienda, 1998; Oliverez, 2006; L. X. Pérez, 1999; P. A. Pérez, 2007; Wolf, 2007) and, further, some of these studies do not consider whether students intend to enroll in a two-year or four-year college after high school (Anderson, 2008; Carreras, 1998; Cooper et al., 2002; Gomez, 2005; Kao & Tienda, 1998; L. X. Pérez, 1999; Wolf, 2007).

Although it seems reasonable that most researchers focus on the high school years because it is the time that students make choices leading them to enroll in a college (A. F. Cabrera & La Nasa, 2000a), research on postsecondary expectations and plans (Chen et al., 2010, Table 1) and college enrollment (U.S. Bureau of Labor Statistics, 2010a) for all high school seniors has found that there is an inconsistency between Latina/os' postsecondary plans and their actual behavior upon graduation from high school. This finding suggests that additional research focused on Latina/os who successfully complete the college choice process (actually enroll in a college) would increase our understanding of the Latina/o college choice process. As pointed out by Swail, Cabrera, Lee and Williams (2005c), it is important to follow "[Latina/o] students in the education pipeline from the moment they and their families begin to aspire to postsecondary studies to the point of degree completion" (p. 1).

Further, Perna (2000) argues that studies should consider whether a student intends to enroll in a two-year or four-year school because students are likely to consider different factors in the decision to enroll in a four-year rather than a two-year college. While some studies aimed at understanding the college choice process of students who choose community colleges are necessary, we also need firsthand accounts of why some Latina/os go against the norm and choose to attend four-year colleges rather than first attend a community college – a choice that is more likely to lead to the attainment of a bachelor's degree (Admon, 2006; Benítez & DeAro, 2004; Laden, 2004). These firsthand accounts can provide valuable information to K-12 and four-year college administrators and policymakers as to what can be done to improve the representation of Mexican American and other Latina/os at four-year colleges.

Characteristics of First-Generation College Students

Latina/o first-generation students are increasingly the focus of college choice researchers (Ceja, 2001; Collatos et al., 2004; Oliverez, 2006; L. X. Pérez, 1999; P. A. Pérez, 2007; Rooney, 2008; Talavera-Bustillos, 1998). In part, interest in first-generation students is based on the knowledge that most Latina/o college students are first-generation college students (Esprivalo Harrell & Forney, 2003; Nunez & Cuccaro-Alamin, 1998). Interest in first-generation college students also indicates an acknowledgement that this population faces challenges to college access and completion (Ceja, 2001; Collatos et al., 2004). First-generation college students are an important population to study because they have different influences in the college choice process than college students with college-educated parents (Saenz, Hurtado, Barrera, Wolf, & Yeung, 2007). As a result, first-generation college student may require different

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programs and services from the colleges in which they enroll than students whose parents went to college. This section presents a brief description of the demographic characteristics of first-generation college students. In particular, it focuses on first-generation college students at four-year colleges, the population of interest to this study.

The definition of "first-generation" varies in the literature. Some studies that focus on the college choice process of first-generation students broadly define first-generation as undergraduates whose parents never enrolled in postsecondary education (Nunez & Cuccaro-Alamin, 1998; Pryor et al., 2006). Other studies define first-generation college students as students whose parents have never earned a bachelor's degree but may have some postsecondary experience (Engle & Tinto, 2008; Mendez, 2003). Still others define first-generation as a student whose parents have not gone to college and who have no older siblings who went to college before them (Rooney, 2008; Talavera-Bustillos, 1998).

The National Center for Education Statistics conducted a series of studies about the experiences of high school graduates and postsecondary students whose parents did not attend college (Choy, 2001). Findings indicated that when it came to the likelihood of enrolling in college, students who had parents with a bachelor's degree or higher had an advantage over first-generation college students. Among 1992 high school graduates, 59% of first-generation students had enrolled in college by 1994, compared to 93% of students whose parents had a bachelor's degree or higher (Choy, 2001).

NCES stressed that while lower parental education may reduce the likelihood of enrolling in college, it is only one factor linked to college enrollment. Accordingly, NCES proposed that investigating first-generation students' college choice process may

generate an understanding of how to lessen the influence of parents' education (Choy, 2001). Swail, Cabrera, Lee and Williams (2005c) confirmed NCES's hypothesis, finding that Latina/o first-generation students were as likely to complete a bachelor's degree as compared to their counterparts with college-educated parents once academic preparation and aspirations were controlled.

In addition to the work of NCES (Choy, 2001), in a report using data collected through the Cooperative Institutional Research Program (CIRP) Freshman Survey, Saenz and associates (2007) investigated the pre-college behaviors, college-going motivations and career-oriented behaviors of first-time, full-time, first-generation college students, compared to their peers with college-educated parents. The data for this report were drawn from a weighted national normative sample of students attending four-year public and private institutions (Saenz et al., 2007). The report classified as first-generation those students whose parents' educational attainment was high school graduate or less.

CIRP data reveals that between 1971 and 2005 the proportion of first-time, full-time freshmen at four-year institutions who were first-generation college students declined. In 2005, 16% of first-time, full-time freshmen were first-generation college students, compared to 39% in 1971 (Saenz et al., 2007). Saenz et al. attributed this decline to increasing levels of education among the U.S. population. Nevertheless, while the overall share of first-generation students at four-year colleges is on the decline, this education upgrading has not been equally distributed across all the various racial/ethnic groups.

The findings from Saenz et al.'s (Saenz et al., 2007) study confirm NCES's (Choy, 2001) findings that first-generation college students are more likely to be

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Latina/o. While the national average of first-generation freshmen students in 2005 was 16%, the proportion was much higher for Latina/os (38%) and African Americans (23%) (Saenz, et al.). Whereas all racial/ethnic groups have shown a decline in the representation of first-generation students, this proportion has remained highest for Latina/os and lowest for Whites (Saenz, et al.). Saenz, et al. reported that since 1971 Latina/os have shown the slowest decline in their representation of first-generation college students and speculated that it is attributable to both Latina/o student overrepresentation in community colleges and Latina/os' trouble accessing four-year colleges.

Key findings from Saenz, et al.'s (2007) study also revealed that first-generation college students are more likely to: go to college because their parents wanted them to go; expect to get a job to pay for college expenses; attend college to increase their income; and consider financial factors when choosing a specific college. Moreover, first-generation students have other similar characteristics. They are more likely to: choose colleges within 50 miles from home, rely on the advice of high school counselors and relatives when choosing a college to enroll, and be most influenced by the academic reputation and national ranking of an institution. Additionally, they are less likely to live on campus and be academically self-confident, especially in self-ratings of math and writing ability (Saenz et al., 2007). This last finding provides support for NCES's (Choy, 2001) conclusion that first-generation college students are less likely to be prepared academically.

Introduction to College Choice

Researchers have used various theoretical frameworks and models to provide details and insights on the college choice process, the process through which students make decisions about whether and where to go to college (Bergerson, 2009a) and 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 the decision of whether to go to college (Kotler & Fox, 1985), and still others have described the entire college choice process (Hossler & Gallagher, 1987; Perna, 2006). This section begins with a brief description of the college choice process in terms of the early theoretical frameworks employed in the college choice literature. The next section looks at the development of models that attempt to explain the college choice process.

Generally, explanations of the college choice process have been based on three theoretical frameworks: psychological, sociological and economic (Paulsen, 1990). The psychological viewpoint focused on how environmental, institutional and student characteristics of a college's environment were likely to impact student enrollment (Paulsen, 1990). Environmental characteristics included the population of potential college students and job opportunities for college graduates versus non-college graduates; institutional characteristics included tuition and admissions selectivity; and student characteristics included family income and parental education levels (Paulsen, 1990). Studies examining college choice from the psychological standpoint have found that when job opportunities for non-college graduates improved, this increase in job

opportunities decreased the likelihood of college attendance at the national level (Paulsen, 1990).

In contrast to the psychological outlook, which focused on the institution, the sociological point of view focused on the student. Guided by a general status attainment process, which focuses on how aspirations are shaped, the sociological view examined the formation of college aspirations, emphasizing the influence of student characteristics on the college choice process (Paulsen, 1990). Student characteristics included scholastic aptitude (Chapman, 1981)*,* socioeconomic status (Chapman, 1984; Hearn, 1988), parental income and education (Litten, 1982) and family income (St. John, 1990). Studies that looked at the college choice process from a sociological viewpoint have suggested that students' predisposition to attend college is influenced by their background characteristics (Hossler & Stage, 1992; Kao & Tienda, 1998). For example, Hossler and Stage concluded that parents' educational level is positively related to students' aspirations.

Similar to the sociological viewpoint, the economic point of view focused on the student. The economic perspective viewed college choice as an investment-like decision process in which students consider the perceived monetary benefits and costs of college attendance (Paulsen, 1990). According to the economic viewpoint, students decide to invest in college if the expected benefits outweigh the expected costs (Paulsen, 1990; Perna, 2006). Economic factors have long been a focus in the literature on the college choice process (Leslie & Brinkman, 1987; St. John, 1990). Drawing on the High School and Beyond (HSB) sophomore cohort and addressing the issue of the effects of tuition and financial aid on student enrollment decisions, St. John (1990) noted:

(1) all forms of financial aid- grants, work, and loans- were effective in promoting

enrollment; (2) . . . aid (any type) had a stronger influence on enrollment than a . .

. reduction in tuition; (3) low-income students were more responsive to increases

in grant aid than to increases in loans or work study; and (4) high-income students

were not responsive to changes in aid amounts. (p. 1)

Similarly, the Advisory Committee on Student Financial Assistance (2006) described

how parent and student concerns about college costs and financial aid weakened plans to

attend college and actual enrollment.

College Choice Models. These three theoretical frameworks provided the

foundation for the development of a number of conceptual models for studying college

choice that combined ideas from the sociological and economic views (Hossler et al.,

1999). Chapman (1981) put forth a theoretical model of student college choice that

detailed the influences on students' choice of which college to attend. The model

proposed that to understand a student's choice of which college to attend, one needs to

take into account both student characteristics (socioeconomic status, aptitude, educational

aspirations and academic performance) and external influences (the influence of

significant persons, college characteristics and college efforts to communicate with

students). Chapman claimed that both student characteristics and external influences

contribute to student's general expectations of college life. This 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). Chapman maintained that admissions officers not

operating from a model of student college choice might overlook ways to improve the effectiveness of their recruiting or overestimate the importance of recruitment activities.

Litten (1982), building on Chapman's (1981) model, developed an expanded model of the college selection process that identified additional background characteristics, such as race, sex, ability level, parents' educational levels, and geographic location. Litten examined how different types of students approached and participated in the college choice process and found differences in the timing of the process, parental education effects on the conduct of the college selection process, and the way college information is obtained. Litten argued that "a more elaborated and specific model of college choice" (p. 400) permitted college administrators to devise optimal recruiting strategies and allowed administrators to check for group differences in recruitment markets. Litten also called for further research validating, explaining and elaborating on the ways in which student attributes affected the college selection process of the increasingly diverse population of college-age students.

The majority of studies on the college choice process utilize Hossler and Gallagher's (1987) three phase model of college choice (Bergerson, 2009a). Based in part on a combination and simplification of previous work, the model categorized the college choice process into three stages: (1) *predisposition,* the decision to go to college instead of taking other paths; (2) *search,* searching for general information about college and learning about specific institutions; and (3) *choice,* in which students complete applications and choose a specific institution to attend (A. F. Cabrera & La Nasa, 2000a; Hossler et al., 1999).

The Hossler and Gallagher (1987) model has provided the theoretical framework for work examining the college choice process for different groups of students. For example, Hurtado, Inkelas, Briggs and Rhee (1997) used concepts from Hossler and Gallagher's model to look at the college application behaviors of various racial/ethnic groups. Likewise, Talavera-Bustillos (1998) used the model to analyze how Chicanas experienced the college choice process. These studies reflect the development of more recent college choice literature, in which researchers focus on the college choice process of students from various groups to understand differences in the college choice process (Bergerson, 2009a). Researchers began to examine why there were significant differences in educational attainment across racial/ethnic, socioeconomic, and other groups (Bergerson, 2009a). Much of the research up to 1990 had been about college choice based on an underlying assumption that all groups had equal access to college. Many college choice researchers now also consider the possibility of inequitable access to college (Bergerson, 2009a).

Building on Hossler and Gallagher's (1987) work, other researchers further explored the college choice process and developed models that reflect a growing understanding of the complexity of the college choice process. For example, Nora and Cabrera's (1992) model outlined factors influencing each of Hossler and Gallagher's stages and outcomes for each stage. Another extension of the Hossler and Gallagher model includes A. F. Cabrera and La Nasa's (2000b) model which incorporated *when* the college choice stages took place, by associating each of Hossler and Gallagher's stages with a specific grade level. According to this model, predisposition begins as early as the seventh grade and ends as late as the ninth grade; search begins as early as the 10th grade

and ends as late as the 12th grade; and choice begins as early as the 11th grade and ends as late as the 12th grade. By considering grade level, influential factors, outcomes, and grade level, both models show how the Hossler and Gallagher model can be expanded and how college enrollment can be increased by taking particular actions at each stage of the college choice process.

Most recently, Perna (2006) proposed a new model for studying both college choice and access to college. Perna argues that existing models are useful but "insufficient for understanding all sources of observed differences in college choice across family income and racial/ethnic groups" (Perna, 2006, p. 110). Perna's model integrates aspects of the economic and sociological viewpoints on college choice. Perna agrees that college choice decisions are based on a comparison of the expected benefits with the expected costs (economic perspective). However, she maintains that calculations of expected costs and earnings are shaped by 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 (sociological perspective).

First, Perna's model (2006) proposes that a student's habitus (values and beliefs that shape an individual's views and interpretations) regarding college choice, will reflect the student's demographic characteristics, gender, race/ethnicity, SES and cultural and social capital. Second, Perna asserts that the school and community context recognizes the ways in which social structures and resources assist or obstruct students during the college choice process. Third, the higher education context assumes that colleges and universities shape the college choice process. The fourth contextual layer, the social,

economic and policy context, proposes that social forces (e.g., demographic changes), economic conditions (e.g., unemployment rate) and public policies (e.g., establishment of a new need-based grant program) influence college choice.

Perna (2006) suggests using the model to better understand the differences across groups in college choice outcomes because it explicitly identifies a myriad of influences on a students' college choice process. According to Perna (2006) this model is also useful for examining how educational attainment may vary across racial/ethnic, socioeconomic, and other groups because the model assumes that the pattern of educational attainment is not universal in that it recognizes student differences in access to the resources that shape college choice.

In summary, college choice research leading up to 1990 was framed by three perspectives: sociological, psychological, and economic (Paulsen, 1990). First, the psychological perspective emphasized the environments of an institution. Second, the sociological perspective examined the formation of college attendance aspirations as part of a general status attainment process. Third, the economic perspective viewed college choice as an investment-like decision process. In the 1980s a number of conceptual models were developed for studying college choice, including the Chapman (1981) model and the Hossler and Gallagher (1987) model. To date, much of the college choice literature uses Hossler and Gallagher's three phase model of college choice to examine the college choice process. To further understand the complexity of the college choice process for different groups, more recently developed models such as Perna's (2006), may be more advantageous either alone or in conjunction with the Hossler and Gallagher (1987) model.

College Choice Process for Mexican American Students

Some researchers have explored the college choice process of Latina/o students. This literature examines the college choice process of Latina/o students in light of two important trends. On the one hand, the number of Latina/os enrolling in college is increasing. On the other, Latina/os continue to be underrepresented among undergraduates. This section summarizes the body of literature related to the college choice processes of Mexican American and Latina/o undergraduate students. Very few studies examine the topic of college choice as it relates to Mexican American students. Therefore, the research synthesized here incorporate studies that possibly include other Latina/o ethnic groups, not just Mexican American students. Furthermore, since Latina/os are more likely to be first-generation college students than other students (Santiago, 2007), this review includes research focused on first-generation students. Thus, research that increases our understanding of the college choice process of first-generation college students may also do the same for our understanding of the college choice process of Latina/o students. The college choice process of Mexican American students described in this section is structured using Hossler and Gallagher's (1987) three stage model of college choice, one of the theoretical frameworks of this study.

Predisposition. Studies that focus on the predisposition stage highlight the formation of educational aspirations and intentions (A. F. Cabrera & La Nasa, 2000a). This body of work may examine the factors that influence this stage as well as the outcomes of the stage. The underlying theme in the literature is that while there are some similarities between Latina/os and other racial/ethnic groups during the predisposition stage, Latina/os experience this stage differently. For instance, Kao and Tienda (1998)

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examined how educational aspirations were formed and maintained from eighth to twelfth grade. In their study, the 31% of Latina/o twelfth graders aspiring to graduate from a four-year college reflected the average (33%) for all racial/ethnic groups (Kao & Tienda, 1998, Table 1). However, this study also suggests that Latina/os experience the predisposition stage differently because when compared to Asian American and White students, Latina/os were less likely to maintain their college aspirations from eighth to twelfth grade (Kao & Tienda, 1998). This finding underscores the importance of understanding how different racial/ethnic groups form college aspirations.

Some studies (Hamrick & Stage, 2004; Rooney, 2008) highlight the importance of parents in the formation of college aspirations for Latina/os. For all groups, parents play a key role in the predisposition stage (Hossler et al., 1999; Hossler & Stage, 1992). For Latina/os, parents can have the largest effect on students' predisposition stage (P. A. Pérez, 2007; Ceja, 2001; Talavera-Bustillos, 1998). Hamrick and Stage (2004) found that parental expectation was the strongest predictor of the predisposition to attend college, with parents' expectations being a strong indicator of Latina/o students' predisposition. Hao and Bonstead-Bruns (1998) also looked at Latina/o, specifically Mexican American, parents' and students' educational expectations. They noted that higher levels of parent-student interactions in learning activities (e.g. parents' involvement in children's school learning at home, parents taking children to extracurricular classes and activities, and parents' involvement with the child in other learning activities) increased the number of years of schooling that eighth graders expected to complete.

Finally, Azmitia et al. (1994) contrasted the educational aspirations of Mexican American parents against White parents' educational aspirations for their children.

Azmitia et al. found that Mexican American parents consistently held high educational aspirations for their children, with most wanting their children to go to college. Also, Azmitia and associates concluded that "although [Mexican American] parents' high aspirations could be considered a resource for their children, a source of vulnerability was seen in parents' varying levels of knowledge as to how to help their children attain such aspirations" (p. 16). Some parents, for example, were aware that school grades were important for college, but many did not know about financial aid or college application procedures. Consequently, despite their high expectations, Mexican American parents may not be able to give their children the information they need to maintain and realize college aspirations.

Much of the Latina/o college choice literature stresses the effect of parents on students' predisposition stage. In addition to parents, family members, including siblings, play important roles for Latina/os during the predisposition stage. On the whole, the Latina/o college choice literature indicates that older siblings play a role in the college choice process (Butner et al., 2001; Ceja, 2001; González, et al., 2003). Siblings can play a role in the development of aspirations and the intentions to continue education beyond high school by serving as role models, sharing information about college, and providing encouragement (M. T. Hurtado, 1997; Ceja, 2006). For example, Gandara (1995) focused on the factors that created academic success among 50 low-income, high achieving Mexican Americans who had earned a Ph.D., M.D., or J.D. She noted that a number of these high achievers reported that older brothers and sisters played a significant role in their lives by transmitting college expectations. Although some studies that examine Latina/os' college choice process illuminate the important role of older

sibling in the decision to go to college, there is still much that we do not know about the specific ways that older siblings influence college aspirations.

In addition to the influence of parents and other family members, studies on the influence of SES on the college choice process have found that SES influences the predisposition stage of Latina/os (Hamrick & Stage, 2004; Kao & Tienda, 1998). Hamrick and Stage (2004) explored the predisposition of students attending high-minority, low-income schools. The authors found that SES, as measured by parents' education and income, had an impact on the predisposition of African American and Latina/o students. This finding was not the case for White students, illustrating once again the need to better understand the college choice process of different racial/ethnic groups.

While some researchers have established SES as a predictor of college aspirations for Latina/os (Hamrick & Stage, 2004; Kao & Tienda, 1998), less is known about *why* SES has an effect. Butner et al. (2001) speculated on why SES may have an effect on the college choice process. The authors, in their study of the college choice process of Latinas and African American females, found differences in the "expectation and meaning of college for individuals from different socioeconomic groups" (Butner et al., 2001, p. 31). They suggested that "SES mediated . . . networks associated with college attendance" (Butner et al., 2001, pp. 31-32). Similarly to Butner et al.'s argument, Jun and Colyar (2002) proposed a connection between social networks, cultural capital and SES as a predictor of educational outcomes. Social networks can be defined as "linkages between individuals, groups and institutions" (Jun & Colyar, 2002, p. 201). Jun and Colyar argued that the social/class standing of low-SES families creates a barrier that

hinders their ability to have well developed social networks and the cultural capital necessary for the promotion of education.

Beyond background characteristics, high schools can also influence the formation of college aspirations (Ceja, 2001; Meredith, 2008). Unfortunately, for many Latina/os, high schools prove to be difficult places to aspire to college. In some schools, there is a disproportionate placement of Latina/os into special education programs (González, et al., 2003). In other schools, teachers and counselors give messages that limit college aspirations and do not support Latina/o students who may be interested in attending college (Butner et al., 2001; L. X. Pérez, 1999). In their study of the college choice process for Latinas and African American females, Butner, et al. (2001) noted that one barrier these students faced was low expectations from high school counselors. Furthermore, L. X. Pérez (1999) pointed out that teachers and counselors formed roadblocks for parents trying to support their children's college aspirations. The literature tells us that Latina/os frequently come across teachers and counselors that do not care about their college interests and aspirations. Conversely, some Latina/os attribute their college aspirations to teachers who saw potential in them and encouraged them to go to college (Butner et al., 2001; Rooney, 2008). Therefore, the role of teachers during the predisposition stage should not be underestimated or ignored altogether

In addition, high school "tracking," a practice that purports to group students in courses based on needs, interests or abilities (Oakes & Guiton, 1995), oftentimes results in Latina/os being placed in classes that do not encourage college aspirations. Oakes and Guiton, in their examination of tracking decisions at three high schools, concluded that "Hispanics at all three schools were almost always judged as the least well-suited for

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academic work and were most often associated with low-track academic courses and vocational programs" (p. 17). Because racial/ethnic minority students are more likely than Whites to be in classes for the non-college bound (Oakes & Guiton, 1995), it is more difficult for these students to develop aspirations for postsecondary education.

In addition to school factors, researchers have recently turned their attention to how social and cultural capital play a role in the predisposition of Latina/os. Some studies have focused on the social relationships from which a student is potentially able to receive various types of resources and support (Ceja, 2001; Cohen, 2009; Stanton-Salazar & Dornbusch, 1995). Stanton-Salazar and Dornbusch's study looked at Mexican American high school students' aspirations and found a link between levels of social capital and school-based ties. In particular they found that students with higher educational aspirations had higher levels of social capital, in terms of the number of high-status contacts (adults with access to institutional resources, such as college-related information) and school-based weak ties (sources of college information-related support, such as teachers, counselors, and other school personnel) in the network of people they knew who could provide college information-related support.

Studies exploring the impact of social capital on the predisposition of Latina/o students have also focused on how social networks, "linkages between individuals, groups and institutions" (Jun & Colyar, 2002, p. 201) influence the development of college aspirations. According to Coleman (1988), through the relationships developed with others in social networks, individuals have more social capital on which they can draw on in a time of need. In addition, Coleman (1988) argued that social networks establish expectations and develop norms. Applied to the predisposition stage, Latina/o

students may develop college aspirations if there is a transmission of college attendance expectations and norms from the student's social network. P. A. Pérez and McDonough (2008) expanded our understanding of how social networks of parents, siblings, peers, and high school contacts, are influential resources as Latina/os formulate their college plans. Granted, the authors found that social networks can have both positive and negative effects on college aspirations because they contain "individuals who can either swing open or close shut the college-going doors for Latina/o students" (p. 260).

As P. A. Pérez and McDonough (2008) noted, peers can have both positive and negative effects on college aspirations. Other studies on the impact of peers on Latina/os' college aspirations have provided conflicting conclusions regarding whether peers are a positive or negative influence on the college aspirations of Latina/os (Contreras-Godfrey, 2009; Gomez, 2005). For example, Azmitia and Cooper (2001), in their examination of the influence of peers on sixth and seventh graders in a community college academic outreach program, found that peers challenged college aspirations. Gomez (2005) supports Azmitia and Cooper's finding, asserting that the college aspirations of some Latinos were negatively impacted by peers who were not planning to go to college. However, P. A. Pérez's (2007) finding, in her study of the college choice process of Mexican American students, contradicts Azmitia and Cooper's and Gomez's conclusions on the negative influence of peers. Pérez found that students were encouraged by their friends to go to college. Furthermore, Contreras-Godfrey (2009) concurs with Pérez's conclusions on the positive influence of peers. Contreras-Godfrey's (2009) study found that peers influenced some Latinos to go to college.

Thus, while peers matter in the predisposition stage of Latina/os, they may have both a positive and negative influence on values and behaviors. The literature suggests that peers are a positive influence when students are a part of a strong peer group whose members mutually support each others' college aspirations (Contreras-Godfrey, 2009; DiMaggio & Mohr, 1985; Gomez, 2005). DiMaggio and Mohr asserted that cultural capital makes possible participation in student peer groups that value education and facilitate frequent conversations about future educational plans.

Cultural capital, or cultural values, knowledge, skills and abilities (Tierney & Hagedorn, 2002) play an important role in Latina/o students' predisposition stage. According to Jun and Colyar (2002), students without the cultural capital of the middle and upper classes may have lower educational aspirations and lower college participation rates. This implies that Latina/os students, many who are of lower SES, may lack the access to the necessary cultural capital that encourages them to further their education. Tierney (1999) provided another example of the importance of cultural capital during the predisposition stage with an examination of a college preparation program that used several strategies to enhance students' cultural capital. One way the program embodied this concept was to transmit to low-income students the message that "high school is not enough" (p. 88). Tierney argued that by doing this, the program instilled in the low-income students a form of cultural capital that middle and upper class students regularly receive through their families and neighborhoods.

The fundamental principle underlying research on the predisposition stage of Latina/o students is that despite the commonalities with other racial/ethnic groups, Latina/os experience important differences in the college choice process that merit further

investigation. Several trends in Latina/os' predisposition stage may be making it difficult for them to form and maintain college aspirations. Specifically, Latina/o parents often are aware of the importance of academic preparation for college, but they may not know about financial aid or college application procedures, thereby making it difficult for them to help fulfill their children's college aspirations (Azmitia et al., 1994; L. X. Pérez, 1999). Further, "tracking" oftentimes results in Latina/os being placed in classes that do not encourage college aspirations. In as much as Latina/o students are more likely than Whites to be in classes for the non-college bound, it is more difficult for them to develop, much less fulfill, college aspirations (González, et al., 2003; P. A. Pérez, 2007). In addition, the college aspirations of some Latina/os are negatively impacted by peers who are not planning to go to college (Azmitia & Cooper, 2001; Gomez, 2005). Lastly, Latina/os' social networks can have negative effects on college aspirations when they contain individuals who limit college access (Butner et al., 2001; P. A. Pérez & McDonough, 2008). Despite these obstacles, there are many Latina/os students who develop and maintain predispositions to attend college and continue on to the search stage of the college choice process.

Search. In the second stage of the college choice process, students gather information and talk to parents, peers, guidance counselors, and college admissions staff as they consider which colleges they may attend after high school (Hossler, et al., 1999). This section looks at our understanding of the search stage, addressing three influences on this stage: students' access to information about college, knowledge of financial aid and perception of their ability to pay for college.

To begin with, Latina/o students generally are uninformed or misinformed about college (Admon, 2006; Kao & Tienda, 1998). Researchers (P.A. Pérez & McDonough, 2008; Talavera-Bustillos, 1998) have speculated that this lack of information results from Latina/os gathering information about college differently than other students. For example, based on their nine-year study of high schools students, Hossler et al. (1999) concluded that during the time period when students were most actively involved in learning about colleges they sought information primarily from teachers, guidance counselors, and college admissions personnel. However, Latina/o students may be seeking information from other sources (Admon, 2006; P. A. Pérez, 2007). For instance, high student-to-counselor ratios at many high Latino enrollment high schools means counselors may not be readily accessible for one-on-one college counseling. The American School Counselors Association's recommended student-to-counselor ratio is 250-to-1 (American School Counselor Association, n.d.). This ratio was exceeded in 2009-2010 in the four states where Latina/os are the largest share of the population (New Mexico: 400:1; Texas: 437:1; California: 810:1; Arizona: 815:1) (American School Counselor Association, n.d.; Infoplease, 2007). Although guidance counselors may be a significant source of information for students' college choice process, many Latina/o students are seriously underserved by their counselors when it comes to college information (Ceja, 2001; Cohen, 2009).

Lack of information and misinformation may be making it difficult for Latina/os to access a college education (Admon, 2006; Gomez, 2005). Knowledge of financial aid and students' perceptions of their ability to pay for college influences the schools that a student will want to consider and learn more about (A. F. Cabrera & La Nasa, 2000a).

Despite the importance of financial aid knowledge and students' perceptions of ability to pay, some research (Ikenberry, Hartle, & American Council on Education, 1998; Kao & Tienda, 1998) has found that Latina/o students and their parents know less than other racial/ethnic groups about financial aid and college costs. This lack of information can result in a distorted perception of their inability to pay for college (L. X. Pérez, 1999).

It is clear that Latina/os experience the search stage of the college choice process in ways that are different from other students. The research suggests a search stage that is characterized by a lack of information about financial aid and paying for college (Admon, 2006; Gomez, 2005; Ikenberry et al., 1998). Yet, many Latina/o students do successfully make their way through the search stage and move onto the choice stage.

Choice. During the choice stage, students make decision about where to apply and enroll (A. F. Cabrera & La Nasa, 2000a; Hossler & Gallagher, 1987). This section reviews the research related to the choice phase of the college choice process, with a focus on how parents, tuition, financial aid, geographic location and academic preparation shape this stage for Latino students.

Three parental factors can have a significant impact on the choice stage of Latina/o students: parental income, parental education, and parental involvement. Much of the discussion about parental income and education in the Latina/o college choice literature has been about parental income and education as measures of SES (M. T. Hurtado, 1997; S. Hurtado, et al., 1997; Rooney, 2008). Latina/o students are more likely than other undergraduates to be low-income, first-generation students (Santiago, 2009). S. Hurtado, et al. (1997) noted in their study of student college application behaviors that SES (as measured by family income, parental education, and employment status) is

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related to the development of students' choice set, or "a group of institutions that the student wants to consider and learn more about before making a matriculation decision" (A. F. Cabrera & La Nasa, 2000a, p. 9). In particular, for Latina/o students, family income, more than parental education, influenced the number of college applications a student submitted. The authors found that Latina/o students whose family income was less than $50,000 were likely to submit fewer applications than students whose family income was over $50,000. On the other hand, parental education did not play a significant role for Latina/os in the number of applications submitted.

Not only are measures of SES related to the number of college applications submitted by Latina/os, other research findings (M. T. Hurtado, 1997; Perna, 2000) have indicated that SES measures are related to their college enrollment. Still, there is variation in how different measures of SES relate to Latina/o college enrollment. Whereas M. T. Hurtado (1997) found that family income and mother's education were related to college attendance, she also found no relation between father's education and college attendance. These findings suggest that students are more likely to apply to more colleges if they have a higher family income and more likely to enroll if their mother is more educated. The findings also suggest the gender of the parent matters in that Mexican American mothers and fathers do not influence the college choice stage equally.

Finally, Kao and Thompson (2003), in their overview of research on racial, ethnic, and immigrant differences in educational achievement and attainment, argued that "parental education and family income is probably the best predictor of eventual academic outcomes" (p. 431). They characterized Latina/os and Mexican Americans as more disadvantaged than whites and Asian Americans in terms of parental education and

overall SES. They also noted that Latina/os, low-SES students, are disproportionately represented in community colleges, suggesting that Latina/os are likely selecting community college due to their low SES status rather than preferences that stem from being Latina/o. That is, SES matters more than race/ethnicity when choosing a community college for enrollment (Kao & Thompson, 2003).

In addition to parental income and education, a number of studies have emphasized parental involvement and expectations as a significant influence on the choice stage of Latino students. For instance, Perna and Titus (2005) found that parental involvement is related to college enrollment but that the relationship between the two varied by race/ethnicity. Using longitudinal data from the National Educational Longitudinal Study (NELS), the authors operationalized parental involvement using two indicators: parent-student involvement (the frequency of parent-student discussions about education-related issues) and parental monitoring (whether parents had rules about grade point average, doing homework and attending school). For all students, the odds of enrolling in any college increased with the frequency with which the parent discussed with the student education-related topics, contacted the school to volunteer, and initiated contact with the school about academics.

In terms of four-year college enrollment, Perna and Titus (2005) found that smaller percentages of Latina/os than Whites and Asian Americans were enrolled in a four-year college. Based on the prevalence of different types of parental involvement across racial/ethnic groups, the authors inferred that the difference in the shares of Latina/os than of Whites and Asian Americans enrolled in a four-year college could be explained by racial/ethnic group differences in types of parental involvement. In other

words, higher frequencies of certain types of parental involvement promoted enrollment in four-year colleges. Perna and Titus conceptualized parental involvement "as a form of social capital that provides individuals with access to resources that may facilitate college enrollment" (p. 487) and posited that differences in types of parental involvement across racial/ethnic groups could be explained by differences in parents' "habitus, or view of acceptable types of parental involvement" (p. 509).

Parental involvement also plays a critical role on the probability of completing a bachelor's degree. Swail et al. (2005c) showed that Latina/o parental expectation of an advanced degree had a large and significant effect on Latina/o students in the probability of completing a bachelor's degree. The authors explained that parents who had high expectations behaved in ways that had a positive effect on their children's college planning behaviors. The authors' findings suggest that high parental expectations are vital to the success of Latina/o students.

Before ending the discussion related to parental involvement, it is important to note that both Lopez (2001) and Kiyama (2008) argued that conventional examples of parental involvement are inadequate to describe the ways that Latina/o parents are involved with their children's schooling. For example, Latina/o parents may expose their children to manual labor to show them how hard it is and to make them value education (Lopez, 2001) or they may have older children assist younger siblings with homework (Kiyama, 2008). Lopez noted that these behaviors, if viewed by a traditional concept of parental involvement, make many Latina/o parents appear to be uninvolved in their children's education. However, in his study of parents who were involved with their children's education outside of traditional models, Lopez describes how the children of

these parents, despite their parents' lack of traditional involvement in their education, all were either doing remarkably well in high school or attending college. In her study of how funds of knowledge contributed to the development of the educational ideologies of Mexican families and children, Kiyama also questioned the traditional definition of parental involvement and suggested a redefinition of parental involvement.

> [Parent] involvement may not have been the ideal level of involvement, but it certainly did not change the value placed on their children's education. In fact . . . non-traditional involvement . . . represented the ways in which families redefined involvement even when it was not valued or recognized by the schools. (p. 201)

Parents are not the only, perhaps not even the most important, influence on the choice stage of Latina/o students; the cost of higher education and financial aid are also factors that have been substantially cited in the literature (Carreras, 1998; Ceja, 2001). Although all students tend to overestimate the cost of college (Kirst & Venezia, 2004), Latina/os may be more likely to overestimate the costs of college attendance because many of them are socioeconomically disadvantaged (Grodsky & Jones, 2007; L. X. Pérez, 1999). Previous research on high school students (Kirst & Venezia, 2004) has shown that the overestimation of college costs is a significant issue for low-SES students. One study (Kirst & Venezia, 2004) found that tuition estimates for low-SES students were four to six times greater than the estimates of high-SES students.

Ganderton and Santos' (1995) research used the High School and Beyond (HSB) survey of 1980 to examine the factors that were significant in explaining Latina/o college attendance. Unlike some studies (Hossler et al., 1999), this study focused exclusively on high school graduates who attended college. In their quantitative analysis, Ganderton and

Santos used the students' and families' ability to finance a college education as a proxy for the importance of cost on the decision to attend college. Family's ability to finance a college education was measured by SES, a composite of father's occupation, parents' education, income and household possessions. The authors compared the data across racial/ethnic groups and found significant differences between Latina/os, and whites and African Americans. For example, although Latina/o high school graduates were nearly as likely as Whites to attend college, unlike Whites, the majority of Latina/os were enrolled in two-year colleges.

In terms of cost, Ganderton and Santos (1995) found that being low-SES decreased the probability of enrolling in college for Latina/os. Another major finding of the study involved factors that increased the probability of enrollment. The authors found that increasing the capacity of students or their families to finance college increased the probability of enrolling in college by a larger amount for Latina/os. The authors contend that this finding provides support for the argument that increasing financial aid will increase Latina/o college enrollment. Arbona and Nora's (2007) findings support the previous research of Ganderton and Santos. Like Ganderton and Santos, they only included Latina/os who enrolled in college in their study of college persistence and undergraduate degree attainment among Latina/os. Arbona and Nora suggested that to increase persistence and degree attainment more efforts must be made by college and university administrators to increase financial aid for Latina/o students.

Related to the cost of attendance as an influence on Latina/o enrollment in higher education is the cost of attendance as an influence on *which* college a Latina/o student chooses for enrollment. Kurlaender's work (2006) investigated the factors that influenced

the high rate of Latina/o enrollment in community colleges. In particular, he examined whether financial constraints explained the high presence of Latina/os in community colleges. Kurlaender suggested that it was important to look at SES when looking at which college a Latina/o student chooses for enrollment. He found that limited financial resources is one reason that Latina/os may be more likely to attend a community college, noting that since Latina/os are more likely to be financially disadvantaged, they may be more likely to choose an institution that has low tuition.

Along with cost of attendance, financial aid is also an important factor to Latina/os during the college choice stage (Admon, 2006; Carreras, 1998; Thomas, 1998). Some authors (Bhagat, 2004; Carreras, 1998) have argued that financial aid makes a college more accessible and attractive to Latina/os. Much of the literature about financial aid addresses the availability of financial aid (Noeth & Wimberly, 2002; Thomas, 1998). Carreras looked at the influence of institutional characteristics on the college application decisions of Latina/os. Using a vignette methodology, Carreras found that financial aid had the second largest influence on the college application decisions of Latina/os (academic program availability had the largest effect). If colleges want to increase the likelihood that they are included in the college application plans of Latina/o students, the author argued, they should offer generous financial aid packages for enrollment. Similarly, a study of factors influencing college enrollment by Rooney (2008) found that first-generation Latino students enrolled in the college where they received the best financial aid package. Finally, Thomas' (1998) examination of the factors that influenced African Americans' and Latina/os' decisions to attend college found that the

availability of financial aid also had a significant influence on the college enrollment decisions of Latina/os.

In addition to financial aid, geographic location is also an important factor in the choice stage among Latina/o students. Rooney (2008) found that first-generation students chose the four-year colleges they attended based primarily on cost of attendance and distance from their home. Nevertheless, this study showed gender difference between those who stayed close to home and those who did not. Although almost all of the Latinas in Rooney's study chose to attend a college that was close to home, while almost all of the Latinos went away to college.   P. A. Pérez (2007) also found gender differences in the importance of geographic location on choice, noting that proximity to home was not cited as often by Chicanos as it was by Chicanas in regard to important college choice factors. Kurlaender (2006) hypothesized that proximity to home may be one of the reasons Latina/os choose community colleges. Some of Ceja's (2001) Chicana participants chose to apply to colleges near home not only because of issues of cost but also because of a sense of family obligation.

In addition to cost and sense of family obligation, parental expectations may be another reason Latina/os are staying close to home for college (López Turley, 2006). López Turley looked at parental preferences, describing two types of preferences parents held for their children's college education: college-at-home and college-anywhere. College-at-home parents felt it was important for their children to live at home while attending college. However, college-at-home parents did not feel this was important. López Turley identified Latina/o parents as more likely to be college-at-home parents than college-anywhere parents. Although López Turley cautioned that not all students

with college-at-home parents will have negative outcomes when it comes to applying to and enrolling in college, the author also suggested that these students are at a potential disadvantage because "college choices are likely to be limited to local options" (p. 842).

Finally, the academic preparation and ability of Latina/os affects their application and enrollment behaviors (Perna, 2000; Swail et al., 2005c). For example, Latina/o students in a blended academic and vocational curricular program submit less college applications than Latina/o students in a rigorous academic track (S. Hurtado, et al., 1997). Hurtado and associates argued that Latina/o students in vocational programs are likely applying to for-profit and community colleges rather than four-year colleges.

While tracking provides one possible explanation for Latina/os' predisposition to enroll in community colleges, Zarate and Gallimore (2005), Kurlaender (2006), and L. Gonzalez (2007) offer other explanations. Zarate and Gallimore's longitudinal study of factors that predicted college enrollment for Latina/o students also explored academic ability. They found that academic ability (as measured by standardized tests) helped predict the college enrollment of Latina/os. Their research also demonstrated that students at four-year colleges exhibited significantly higher academic ability and their teachers had rated them higher (than students not in college) on academic progress, reading/language progress and learning ability from kindergarten through eighth grade. Similarly, Kurlaender (2006) argued that weak academic preparation is one reason why many Latina/o students might choose to attend a community college. In addition, L. Gonzalez (2007) found that Latina/o high school students who had taken advanced math courses in high school and had done well on their standardized tests planned to attend a four-year college. In sum, collectively Zarate and Gallimore (2005), Kurlaender (2006),

and L. Gonzalez (2007) reveal that Latina/o students who are not academically prepared may not enroll in college, and of those that do, they are likely to enroll in community colleges. Additionally, once in college, academic preparation is critical for persistence (Swail et al., 2005c)

Based on previous research discussed earlier, it is clear that Latina/o students undergo the choice stage of the college choice process in a way that at times is different from other students. As indicated, a number of researchers have found that parental education, income, and involvement; cost, and financial aid; geographic location; and academic preparation shape this stage for Latina/o students. While the literature suggests that some of these factors exert a positive influence on Latina/o students' choice stage, difficulties related to these factors are also evident. Yet many Latina/o students do successfully complete the college choice process by enrolling in college.

The Relationship between College Choice and College Degree Attainment

During the past decade the number of Latina/os enrolled in degree-granting institutions and earning bachelor's degrees increased considerably (Snyder & Dillow, 2009). Despite Latina/os' progress in college enrollment and bachelor's degree completion, they continue to be underrepresented among both undergraduates and bachelor's degree recipients relative to their demographic representation among the traditional college-age population (Snyder & Dillow, 2009; U.S. Census Bureau, 2010b). Furthermore, Latina/os are less likely to graduate from college than are White and African American college students. As a result, in 2007–08, White students earned 72% of all bachelor's degrees awarded, African American students earned 10%, and Latina/o students earned just 8% (Snyder & Dillow, 2009, Table 285).

Increasing access to college cannot be defined simply as increasing the number of Latina/os enrolled in college; increasing access also includes increasing retention and graduation rates (Arbona & Nora, 2007). The dramatic gap between the share of Latina/os attending college and the share attaining bachelor's degrees (Fry, 2002) suggests that this gap is related to the decisions that Latina/os are making during the college choice process (Arbona & Nora, 2007; Fry, 2002; Swail et al., 2005c). For example, Latina/os are overrepresented in community colleges and students who start at a community college are significantly less likely to obtain a bachelor's degree (Admon, 2006; Benítez & DeAro, 2004; Laden, 2004). Therefore, to increase the retention and graduation rates of Latina/os, it is important to identify the factors that influence this group of students as they make choices leading them to enroll in a four-year college rather than in a two-year college (Arbona & Nora, 2007).

Previous research (Arbona & Nora, 2007; Swail et al., 2005c) has provided substantial evidence of a relationship between college choice, persistence, and degree attainment. Arbona and Nora looked at the characteristics believed to impact college persistence and bachelor's degree attainment among Latina/o high school graduates. They looked at precollege, college, and environmental factors that were believed to predict outcomes at different points in the pathways to college. They noted that:

> Students' academic aspirations and the academic rigor of the curriculum they complete in high school are directly related to the type of college they first enroll in, which in turn is highly predictive of their success in attaining a bachelor's degree. (p. 266)

Similarly, a study of Latina/o students' ability to navigate the educational system and achieve higher levels of learning by Swail, et al. (2005c) found that precollege characteristics, including parental expectations, student aspirations, college planning and high school course-taking patterns impacted bachelor's degree completion. This reinforces the belief that the college choice process is important in the bachelor's degree attainment of Latino students.

College Choice Process for Mexican American Students: Conclusions

Based on a review of the literature, it is clear that there exist a number of significant influences on the college choice process of Mexican American students. Furthermore, the college choice process is complicated by background characteristics common to many Mexican Americans, including being close to the immigration experience, lacking the type of social and cultural capital valued in the college choice process, and being from a low SES background. Additionally, Mexican American college students are likely to be first-generation and older.

Four observations can be made on the basis of the review of the literature of the college choice process of Mexican American students: (1) parents are a key factor, (2) school does not appear to play a key role; (3) peers are influential; and (4) siblings appear to have a role. In the predisposition phase, parents have the largest effect. In other words, parents play an important role in encouraging college aspirations by expecting college attendance. However, the low educational attainment and income of many Mexican American parents may limit the ability of their children to form college aspirations. In addition to parents, other family members may play a positive role in the development of college aspirations by serving as role models, sharing information about

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college and providing encouragement. Further, as with the predisposition phase, parents have an impact on the choice stage. Parental income and education can influence the number of applications Latina/os submit and which schools they choose to attend. Moreover, parental involvement can influence whether and where Latina/o students enroll in college.

Schools also influence the college choice process of Latina/os, although the influence does not appear to play a pivotal role (Gandara, 1995; Sanchez, Reyes, & Singh, 2006). During the predisposition stage, high schools can limit college aspirations because oftentimes Latina/os are attending schools where teachers, counselors and the curriculum do not encourage college aspirations. In contrast to school personnel, high school peers appear to be a strong influence during the predisposition phase.   Despite this strong peer influence, it unclear whether that influence is positive or negative (Contreras-Godfrey, 2009; Gomez, 2005). In some cases, students have been influenced by their peers to go to college, while in other cases students encounter peers who do not value education beyond high school (Azmitia & Cooper, 2001; P. A. Pérez, 2007). In the search phase of the college choice process guidance counselors are often the logical choice for most students who are seeking information about college. Nonetheless, when it comes to getting college information from their counselors, many Latina/os are seriously underserved. Moreover, high school curriculum can influence the choice stage. Latina/o students in vocational programs are likely applying to for-profit and community colleges rather than four-year universities. In contrast, many Latina/o students who plan to attend a four-year college take advanced math courses in high school and have do well

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on standardized tests. Thus, Latina/o students at four-year colleges exhibit higher academic ability (González, et al., 2003; Zarate & Gallimore, 2005).

Much of the Mexican American college choice literature documents the role of parents in providing support and encouragement during the college choice process (Ceja, 2006; L. X. Pérez, 1999). In addition to parents, older siblings appear to play an important role for Mexican American students (Ceja, 2006; Gandara, 1995; Gomez, 2005; M. T. Hurtado, 1997). In the predisposition phase, older siblings influence the development of college aspirations by serving as role models, sharing information about college and providing encouragement. The fact that many Mexican American students are first-generation college students suggests that if they have an older sibling, they will rely on this sibling instead of their parents during the other stages of the college choice process as well. During the search stage, for example, older siblings could serve as a source of information about college, including sharing their preferences for particular institutions and talking to their younger siblings about college.

All of the studies on the college choice process of Mexican American students have found that siblings influence the college choice process of these students. For example, Ceja (2001), whose study focused on the college choice process of first-generation Chicanas, found that older siblings were able to serve as information sources during the college choice process. Ceja noted that siblings "proved to be important sources of information as these Chicanas attempted to sort out their college plans" (p. 101).

Despite evidence that that there is some sibling influence on the college choice process, there is still much we do not know about the involvement of older siblings on the

college choice process of their younger siblings (Cohen, 2009; Sandefur, Meier, & Campbell, 2006). Nonetheless, we do know that siblings have an influence on the college choice process. M. T. Hurtado (1997) found that younger siblings with older brothers in college are more likely to attend college. We also know that older siblings often play an important role in encouraging and fostering the college ambitions of younger siblings (Gandara, 1995). Furthermore, we know that support from siblings advances college preparation (Bonous-Hammarth & Allen, 2005). In general, college students have spoken of the importance of siblings in the college choice process (Butner et al., 2001; Kaczynski, 2011).

Currently, no studies exist that set out specifically to examine older siblings as an influence on the college choice process of Mexican American students. Moreover, the role of siblings in the college choice process for all students is noticeably absent from the literature. Fortunately, the findings of Ceja (2001, 2006), Cohen (2009), M. T. Hurtado (1997), Hurtado-Ortiz and Gauvin (2007), P. A. Pérez (2007) and Talavera-Bustillos (1998) provide some descriptors and characteristics of older sibling involvement in the college choice process of Mexican American students. Therefore, when looking at the role of the older sibling directly, it is possible that older siblings will play a key role in the college choice process because Mexican American students often cite an older sibling as crucial to their college choice process. With the theoretical frameworks in mind, this study introduces the possibility that Mexican American students with an older sibling acquire social and cultural capital through their relationship with their sibling, particularly social and cultural capital that promote information about college, assistance

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with college processes, cultural knowledge, and value of college attainment (Perna, 2006).

Sibling Relationships Research

This section provides a brief overview of relevant conclusions from the sibling literature. It is critical to consult the literature about siblings and the influence siblings can have on individuals before exploring the college choice process of Mexican American first-generation students with an older sibling. The general sibling literature also provides a foundation for understanding why older siblings may influence the college choice process.

General Research. Many sibling studies focus on the relationship between siblings (Collins & Laursen, 2004; Seginer, 1998; Tucker, Barber, & Eccles, 1997; Tucker, McHale, & Crouter, 2001). Nevertheless, sibling relationships have been a lot less studied than relationships with other family members (Collins & Laursen, 2004; McHale, Updegraff, Shanahan, Crouter, & Killoren, 2005; Sanders & Campling, 2004), such as parents. Because sibling relationships are likely to be the longest-lasting in a person's life and because siblings spend more time with each other than with anyone else (Sanders & Campling, 2004), including parents, peers, and teachers (Kluger, Carsen, Cole, & Steptoe, 2006) the study of this vital relationship is important to understanding their role in the college choice process. Collins and Laursen, for example, suggested that during adolescence, the age period when students traditionally progress through the college choice process (A. F. Cabrera & La Nasa, 2000a), students regard their siblings as important sources of friendship, affection, and influence. At the same time, adolescent

siblings experience more conflict with each other than with peers (Collins & Laursen, 2004).

Work on the characteristics of relationships with older siblings constitutes a small focus of study in the already limited sibling relationships literature. From these studies, there is emerging evidence that relationships with older siblings may have important consequences for younger siblings (Tucker et al., 1997). For example, in late adolescence, when students are traditionally in the search and choice phases of the college choice process (A. F. Cabrera & La Nasa, 2000a), older siblings may act as a guide and give advice about plans to younger siblings (Tucker et al., 1997). Another assumption among researchers is that "older siblings may be viewed as an important source of support and knowledge by younger siblings and have influence on younger siblings' goals and interests" (Tucker et al., 1997, p. 65). With regard to school-related goals and interests, older siblings may be viewed by younger siblings as influential sources of support and knowledge regarding educational decisions because older siblings generally make decisions regarding school plans before younger siblings (Tucker et al., 1997). According to one quantitative study, older adolescents sometimes talk to their older siblings about life plans, including educational plans after high school, and rely on them as a source of advice (Tucker et al., 1997).

Other research (Seginer, 1998) has paid attention to adolescents' relationships with older siblings in the context of adolescent-parent and adolescent-peer relationships. Seginer explored the contributions of older siblings, parents, and peers to school-related support by employing a scale that included questions such as "When you are under pressure of papers and exams, who helps you?" Given that there are specific family

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conditions under which a child would prefer close relationships with a sibling rather than

with a parent (Seginer, 1998; Stanton-Salazar, 2001) and, chronologically, sibling

relationships, particularly with older siblings, precede peer relationships (Seginer, 1998),

it is not surprising that Seginer found that positive sibling relationships can contribute to

a sense of school-related support above and beyond the contribution of parents and peers.

Based on the available research, siblings are influential in important ways, including

when it comes to school-related matters. The next section will briefly review research

that examines how the additional factor of cultural context may influence the sibling

relationship.

      Research on Mexican American Siblings. Relationships between adolescent

Mexican American brothers and sisters have been less documented than adolescents'

sibling relationships in White families (Updegraff, McHale, Whiteman, Thayer, &

Delgado, 2005). However, cross cultural perspectives on sibling relationships (Sanders

& Campling, 2004) highlight the need for understanding sibling relationships in their

distinct ethnic/racial contexts. Sanders and Campling reported differences across cultures

in the meaning of "sibling," significance attached to sibling relationships, sibling

cooperation, and sibling caretaking. The construct of *familismo* (familism), thought to

characterize Mexican American family life, provides an alternative framework for

understanding Mexican Americans sibling relationships (Killoren, Thayer, & Updegraff,

2008; Updegraff et al., 2005).

      A fundamental contention put forth by *familismo* is that Mexican American cultural

values, beliefs, and practices may promote close relationships between siblings

(Updegraff, Whiteman, Crouter, McHale, & Thayer, 2006). For example, Updegraff et

al. contend that *familismo,* with its *"*emphasis on family support and loyalty and on interdependence on family members . . . means that sibling relationships may be an especially influential part of children's and adolescents' lives in [the Mexican-American family]" (Updegraff et al., p. 512). *Familismo* beliefs includes the idea that siblings are expected to care for one another (Alvirez and Bean, 1976, as cited in Díaz, 2005). In particular, older siblings serve as caretakers for younger siblings and are to be respected (Alvirez and Bean, 1976, as cited in Díaz, 2005). Sanders and Campling (2004) looked at studies of sibling caretaking across cultures and societies and concluded that "it promotes a sense of interdependence (rather than autonomy), which is valued in many non-Western cultures" (p. 23).

A growing body of work on this topic has affirmed the importance of sibling support for Mexican Americans (Cooper, Jackson, Azmitia, Lopez, & Dunbar, 1995; Ceja, 2001; Sanchez et al., 2006; Stanton-Salazar, 2001). For example, Stanton-Salazar found that some Mexican American adolescents made the decision to not seek the support of a parent because "the disabling forces of lower-class status, the burdens of immigration and resettlement, and the adolescents' own rapid acculturation rendered their immigrant parents ineffectual" (p.29). As a result, these adolescents instead sought support from their social networks, which included older siblings. Additionally, the same author found that in Mexican American immigrant families key influences in terms of social capital often include older siblings and usually wield a good deal of power over the social development of younger siblings.

In other cases, older siblings in Mexican American families can play a significant role in fostering adolescents' resiliency, as sources of intimate counsel, and as role

models (Stanton-Salazar, 2001). Close relationships with older siblings can also provide younger siblings with a sense of validation when adolescents learn that their older siblings have experienced similar successes and mistakes (Stanton-Salazar, 2001). Nonetheless, Stanton-Salazar was clear that a high degree of *familismo* among Latina/o and Mexican American adolescents did not always translate into supportive sibling relationships.

Summary. Researchers have noted the significance of having an older sibling for some adolescents (Collins & Laursen, 2004; Stanton-Salazar, 2001; Updegraff et al., 2006). Older siblings can be important sources of friendship, affection, and influence (Collins & Laursen, 2004); may act as a guide and give advice about plans to younger siblings (Tucker et al., 1997); and can contribute to a sense of school-related support (Seginer, 1998). On the other hand, adolescent siblings experience more conflict with each other than with peers (Collins & Laursen, 2004) and a high degree of *familismo* among adolescents does not always translate into supportive sibling relationships.

Theoretical Frameworks

This study incorporates elements from two college choice models. The models employed in this study were Hossler and Gallagher's (1987) three phase model of college choice and Perna's (2006) proposed conceptual model of studying college choice. The two models not only assisted in the development of the literature review, but also helped in the creation of the questionnaire, first interview protocol, and aided in the analysis of the data. Because Hossler and Gallagher's model has framed much of the college choice research to date, it was primarily used to guide this study. This model proposes a process in which influential individual (e.g., student characteristics; student college values) and

organizational (e.g., school characteristics; search activities) factors interact to produce student outcomes (e.g., college options; choice set) that in turn influence the student college choice process. This model is useful for three main reasons. First, it simplifies the presentation of the college choice process into three stages, predisposition, search, and choice (Hossler et al., 1999). Second it considers the college choice process from the student's viewpoint. Lastly, it takes into account background characteristics and how they can affect the college choice process.

In spite of these benefits, Hossler and Gallagher's model (1987) model has been criticized because it assumes that all students have equal access to information about college (Bergerson, 2009b). For this reason, some researchers have said it does not fully explain the college choice process of students who cannot access some information sources (e.g., low SES students, students of color, first generation students) (Bergerson, 2009b; A. F. Cabrera & La Nasa, 2001; Talavera-Bustillos, 1998). To address this criticism, this study incorporates elements from Perna's (2006) proposed conceptual model of student college choice.

Perna's (2006) model acknowledges that not all students have equitable access to the information and resources necessary for engaging in the college choice process (Bergerson, 2009b). The model proposes four layered contexts which influence the college choice process. Supplementing Hossler and Gallagher's model (1987) model with Perna's model was also based on four key conclusions from the Latina/o college choice literature: (1) parents are a key factor; (2) school does not appear to play a key role; (3) peers are influential; and (4) siblings appear to have a role. Given these conclusions, I incorporated elements from two contextual layers of model, the

individual's habitus and the school and community context. Specifically, I determined

that the variables cultural capital and social capital from the habitus layer and the school

context from the school and community layer of the model were applicable to this study.

The use of these variables allowed me to explore and explain familial, social, and

academic variables identified in the literature as having a potential impact on the college

choice process of Mexican American first-generation students.

In summary, Hossler and Gallagher's (1987) model was the primary theoretical

framework used to guide this study. The study also incorporated elements from Perna's

(2006) model. Rather than using all layers of Perna's model to examine the college

choice process of these students, I only used those elements identified in the literature as

relevant to Mexican American students to guide the study design. By integrating various

variables from Perna's model, this study explored familial, social, and academic variables

and their impact on the college choice process of Mexican American first-generation

students.

Chapter 3: Research Methods

The major research question guiding this study was: How do Mexican American first-generation students who have an older sibling with college experience describe their college choice process? This study also sought to answer the following sub-question: What are some of the familial, social, and academic factors that Mexican American students identify as influences on their college choice process? This chapter begins with a discussion of the study's design and sampling techniques. It then proceeds to a description of the institutional context and the rationale for selecting this site. This is followed by a discussion of the data collection, organization, and analyses processes. Finally, the chapter describes issues of internal validity, reliability, external validity and ethics.

Design of the Study

I utilized a qualitative, descriptive, multiple case study approach to examine the college choice process of a group of Mexican American first-generation college students. Merriam (2009) recommends that researchers conduct a qualitative study when "the focus is on process, understanding and meaning; the researcher is the primary instrument of data collection and analysis; the process is inductive; and the product is richly descriptive" (p. 14). This study met all four of these criteria. First, the study's key concern was to develop a qualitative description of individual students' perceptions of "what went on" (Creswell, 1998) during their college choice process. The descriptive, qualitative approach of this study and its emphasis on students' perceptions guided an in-depth inquiry into the meanings individual students attached to their college choice process. Second, as outlined in detail later in this chapter, I was the primary instrument

of data collection and analysis. Third, analysis of the data incorporated inductive coding, allowing for patterns, themes, and categories to emerge from the data. Finally, the dissertation is "richly descriptive" (Merriam, 2009, p. 16). Data in the forms of quotes are included in support of the findings of this study. According to Merriam, "these quotes . . . contribute to the descriptive nature of qualitative research" (p. 16).

Merriam (1998) described the case study method as an "intensive, holistic description and analysis of a bounded phenomenon" (p. xiii). The bounded system is the "what" to be studied (Merriam, 2009). In this study, the phenomenon of interest is the college choice process of Mexican American first-generation college students who have an older sibling with college experience. This study is a case study because *one* particular group of students (17 Mexican American first-generation students) at *one* particular institution (Arizona State University) is the units of analysis. As Merriam observed, "the single most defining characteristic of case study research lies in delimiting the object of study, the case" (p. 40).

Merriam (1998) explained that a case study is "useful . . . in presenting . . . information about areas of education where little research has been conducted" (p. 38). It was an appropriate methodology for addressing the research questions because we know relatively little about the college choice process of Mexican American students.

Research Site Selection

I used convenience sampling, a common type of purposeful sampling (Merriam, 2009), to select the research site. Convenience sampling is a strategy that involves selecting a sample "based on time, money, location, availability of sites or respondents, and so on" (Merriam, 2009, p. 79). An available site, ASU, was selected as the research

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site. The site was available because the person that was the director of the TRIO Academic Achievement Center at ASU's West campus at the time I was searching for a research site agreed to help with negotiating access (Marshall & Rossman, 2006) to the West Campus, TRIO students at the West campus, and other groups within the West campus. I initially chose the West campus as the research site because I thought that students who applied for admission to the West campus would likely be different than students that applied to and attended another ASU campus. Part of this reasoning was based on the assumption that the West campus was a satellite campus that operated autonomously from the first ASU campus (Tempe), with its own administration, faculty, and student admissions process.

During an informal site visit, however, I discovered that since 2002, ASU's president, Michael Crow, had been reinventing ASU as the model for a "New American University" (ASU Office of University Initiatives, 2010) and the campus-based model of organization was no longer supported at ASU. A fundamental aspect of the new model is the concept of "One University in Many Places." It is "not a system with separate campuses, and not one main campus with branch campuses" (ASU, 2010a). The university has been redesigned to be "college/school-centric," meaning that the university is built around colleges and schools rather than campuses (ASU Office of the President, 2010). President Crow also merged ASU's four campuses into a single institution, sharing students, faculty, staff, and accreditation. The transition to the "One University in Many Places" model resulted in dramatic organizational changes at all four ASU campuses. One of the results of this reorganization process is a centralized admissions process. Incoming students apply to majors, not campuses (ASU, 2007). If the major is

offered at multiple campuses, then the student can choose which campus to attend for their major classes while at the same time being free to take other courses at any campus. If the major is not offered at multiple campuses, then the student by default has to attend their major classes on the campus that houses their major. In fall 2010, of the approximately 250 undergraduate majors that ASU offered (ASU, 2007), only about 10% were offered on multiple campuses (ASU, 2010b).

There are 14 colleges and schools at ASU (Keeler, 2010). The colleges/schools with the largest Latina/o undergraduate student enrollments are the College of Liberal Arts and Sciences (all majors at Tempe), the School of Business (majors at Tempe, Polytechnic, and West, with all but four majors offered only at Tempe), and the College of Nursing and Health Innovation (all majors at Downtown Phoenix). In fall 2010, nearly 1/3 (31%) of Latina/o ASU undergraduates were enrolled in the College of Liberal Arts and Sciences; 12% were enrolled in the School of Business; and 8% were in the College of Nursing and Health Innovation (ASU Office of Institutional Analysis, 2010).

ASU is Arizona's – and the United State's - largest public university in terms of undergraduate enrollment (Moyer, 2010). Two of its campuses, West and Downtown, are located in Phoenix while its other two campuses, Tempe and Polytechnic, are located less than 20 miles from Phoenix. Founded in 1885, the Tempe campus focuses on research and graduate education (ASU, 2010a). The West campus, founded in 1984, focuses on interdisciplinary liberal arts education (ASU, 2010a). The Polytechnic campus was established in 1996 and focuses on learning through an applied approach to professional and technological programs (ASU, 2010a). At the Downtown Phoenix campus, created in 2006, ASU focuses on programs with a direct urban and public

connection (ASU, 2010a). In fall 2010 ASU enrolled approximately 56,600

undergraduate students, 47,000 (83%) of which were classified as full-time students

(ASU Office of Institutional Analysis, 2010). Classified as a Carnegie Comprehensive

Doctoral Research University (Carnegie Foundation for the Advancement of Teaching,

n.d.), ASU's ranking in the 2012 edition of U.S. News & World Report's *Best Colleges*

was 132 (U.S. News & World Report, 2012a) out of 194 ranked national universities

(U.S. News & World Report, 2012b).

As required by the Arizona Board of Regents, ASU guarantees freshmen

admission to Arizona residents who are in the top 25% of their class and complete

academic competency requirements in six subject areas (Arizona Board of Regents,

2006). Arizona freshmen applicants can meet competency requirements by earning a

minimum GPA of 2.0 for each subject area or, in some cases, ACT or SAT scores may be

used to satisfy competencies (Arizona Board of Regents, 2006). Students who are

applying to ASU while enrolled in high school or who have not attended college since

high school graduation are considered freshman students. Data from CollegeData (2011)

shows that ASU admitted 87% of its applicants for the fall 2010 freshman class. Almost

a third of Arizona residents in the incoming class of 9,500 freshmen (Keeler, 2010) were

in the top 10% of their class and the average GPA for all freshmen was 3.39 (ASU Office

of Institutional Analysis, 2011). In addition, the average ACT score for the 2010

freshman class was 24 (ASU Office of Institutional Analysis, 2011) and the median SAT

score was a record 1100 (Keeler, 2010). About two-thirds (73%) of the incoming 2010

freshmen class was composed of Arizona residents (ASU Office of Institutional Analysis,

2011). Since 2009, ASU has required all incoming freshmen to live on campus, while

still allowing certain students to apply for exemptions (Quizon, 2008).

   In keeping with convenience sampling techniques (Merriam, 2009), I also

selected ASU as the research site based on the availability of respondents. In fall 2010,

of its 56,600 undergraduate students, 18% were classified by the university as "Hispanic"

(ASU Office of Institutional Analysis, 2011). ASU does not provide enrollment data by

Latina/o ethnic groups, but given that 90% of Phoenix's Latina/o population is of

Mexican descent (U.S. Census Bureau, 2008), it was likely that most of the Latina/o

undergraduates at ASU came from a Mexican American ethnic background.

Furthermore, ASU data revealed that of the Arizona residents in the incoming 2010

freshmen class, 863 were self-identified "Hispanic/Latino" and first-generation college

students (ASU Office of Evaluation and Educational Effectiveness, 2010). ASU

classifies as first generation those students who indicate in their admissions application

that neither of their parents (or guardians) has graduated from a four-year university

(ASU, 2011). Conversely, this study relies on a slightly different definition of first

generation. In this study, first-generation is defined as an undergraduate student whose

parents never enrolled in postsecondary education. Therefore, while it was not known

how many of the 864 students had parents who had not enrolled in college - along with a

sibling who had college experience - I determined that with such a large population, I was

likely to yield the desired sample size that met the desired criteria. I used the Preliminary

Participant Questionnaire (Appendix B) to obtain parent and older sibling levels of

education for the participant selection process.

Finally, I also selected ASU as the research site to build on existing quantitative data. In the fall semester, ASU's Office of Evaluation and Educational Effectiveness administers to all first-year, first-time ASU students at all campuses the First Year Student Survey (ASU Office of Evaluation and Educational Effectiveness, n.d.). This survey includes items focusing on reasons for attending ASU, early experiences, expectations and background demographics. The findings for the fall 2006 freshmen class (the most recent survey I could locate) indicated that most students (38%) decided to attend ASU two to five months before they enrolled and that ASU was their first choice (ASU Office of Evaluation, 2006). Most students reported that it was essential that ASU prepare them for employment after college (78%) and graduate or advanced education (60%) (ASU Office of Evaluation, 2006). Although 61% of first-time freshmen responded to the survey, it is unclear if these respondents were representative of the entire population of first-year students. Furthermore, the findings were not broken down by race and gender nor did they provide information on the response rate for Latina/o or first-generation students (ASU Office of Evaluation, 2006).

While the annual First Year Student Survey provides important information for ASU, there remain many unanswered questions regarding Latina/o students' expectations about college and factors affecting their decision to attend ASU. To date, there are no qualitative studies that examine Mexican American first-generation student's college choice process at ASU. Moreover, questions regarding the First Year Student Survey's generalizability and applicability of findings to Mexican American first-generation students at ASU calls for additional research on this population.

Sample Selection

I also used purposeful sampling to select participants. Using purposeful sampling to select participants is "based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (Merriam, 1998, p. 61). This sampling technique facilitates the selection of information-rich cases, or cases "from which one can learn a great deal about issues of central importance to the purpose of the research" (Patton, 2002, p. 230). The specific type of purposeful sampling used to select participants was criterion sampling (Marshall & Rossman, 2011).

Criterion sampling involves spelling out the selection criteria essential for choosing the people to be studied, as well as explaining why the criteria are important. Based on the literature, research questions, and the theoretical frameworks guiding this study, I created a list of necessary criteria for participants that guided in the identification of information-rich cases. To increase the probability of selecting students who exemplified the phenomenon of interest, all participants met the following selection criteria: (1) Mexican American ethnic background; (2) first-generation college student where neither parent had enrolled in college as a degree-seeking student; (3) had an older sibling who has enrolled in a college or university as a degree-seeking student; (4) first-time freshman student who graduated with a high school diploma in June 2010 or thereafter; and (5) Arizona resident.

Criterion #1

I selected Mexican American students as the population to examine because although more Latina/os are enrolling in college than ever before (Cook & Córdova,

2006; Perna, 2000), they are still significantly more likely than their counterparts of other racial/ethnic groups (excluding Native Americans) to enter postsecondary education at community colleges rather than a four-year university (Cook & Córdova, 2006). For instance, an NCES study reported that only 37% of White 1992 high school graduates first attended a community college, while 55% of Latina/os began at this type of postsecondary institution (Adelman et al., 2003). Furthermore, among Latina/os, traditional college-age Mexican American students are more likely to attend community colleges than other Latina/os (Fry, 2002). Almost half of Mexican American traditional college-age students enroll in two-year colleges, while less than a third each of Puerto Rican and Cuban undergraduates attend two-year schools (Fry, 2002).

Mexican American college students who begin their postsecondary studies at a four-year university represent a unique population to study. We know that beginning at a four-year college increases the probability of attaining a bachelor's degree (Alfonso, 2006; Christie & Hutcheson, 2003; Monk-Turner, 1995). Therefore, understanding the factors that influenced Mexican American students to enroll in a four-year university may help increase the four-year university entrance rate for this population.

I also chose Mexican Americans because they are the largest subgroup within the Latina/o population (U.S. Census Bureau, 2007; Therrien, 2000). Though the college choice literature's use of the broad terms of "Latina," "Latino" or "Hispanic" (Admon, 2006; Anderson, 2008; Butner et al., 2001; Cejda, Casparis, & Rhodes, 2002; Contreras-Godfrey, 2009; Cooper et al., 2002; L. Gonzalez, 2007) may at times be translated to all students whose countries of origin are in Central and South America and the Caribbean, it is important to be aware of the diversity among Latina/os, and not assume that they are a

homogenous group who experience the college choice process in the same way.

Therefore, I focused on Mexican Americans.

Criterion #2

The term "first-generation" has been defined in a number of different ways in the Latina/o college choice literature. At times, the term is used to describe students whose parents' highest level of education is a high school diploma or less (Ceja, 2001; Gomez, 2005); other times, it can refer to students whose parents attended college, but did not achieve a degree (L. X. Pérez, 1999; P. A. Pérez, 2007;); and sometimes a student is considered a first-generation student only if they are the first in their family, including their siblings, to have attended college (Rooney, 2008; Talavera-Bustillos, 1998). Research on first-generation Latina/o students gives us reason to believe that the college choice process may vary for different groups of first-generation college students. For example, Ceja (2006) found that some first-generation Chicana students were familiar with the college choice process as a result of having older siblings who had already gone to college.

Criterion #3

Participants in this study had at least one older sibling who had college experience. College experience was defined as attainment of an associate or bachelor's degree or having some college experience at a four-year university. Because research on the college attainment of older siblings is limited, the effects of parental education on college attainment along with the college choice literature were generalized to infer older siblings' effects on the college choice process. Overall, research suggests that parents who have earned a college degree are more likely to transmit both cultural knowledge

and the value of higher education to their children (Hossler et al., 1999; Perna, 2006; Stanton-Salazar & Dornbusch, 1995). With respect to siblings, it follows older siblings who have earned a college degrees may also be promoting college attendance to their younger siblings. Furthermore, given that some research (Perna, 2000) suggests that the college choice process is different for students that choose a two-year college than for students who choose a four-year university, I made the decision that if a student had a sibling whose highest educational attainment was "some college," the student would be included as a participant if the older sibling's enrollment was or had been at a four-year university. This decision reflected an assumption that although this type of older sibling did not have a college degree, they nevertheless had experience in a similar situation (attendance at a four-year university). Research suggests that students are more likely to have productive and sophisticated search processes when their parents have had experience in similar situations (McDonough, 1997).

On the whole, the literature on the Latina/o college choice process indicates that first-generation students have little to no information about college available to them at home (Ceja, 2001; González, et al., 2003; P. A. Pérez, 2007). Yet, students whose parents did not go to college but who have an older sibling typically report that their sibling played a role in their college choice process (Butner et al., 2001; Ceja, 2001; Gomez, 2005; González, et al., 2003; M. T. Hurtado, 1997; P. A. Pérez, 2007). Therefore, students were included in this study if their parents had not gone to college, but they had an older sibling who did. Inclusion of this type of first-generation college student may lead to an understanding of the college information and resources available to this subpopulation of first-generation students.

Criterion #4

The students I selected to participate in this study were students who enrolled in college directly from high school into a four-year university the semester following their high school graduation. This study attempted to capture a process that begins as early as junior high school and ends with college enrollment (A. F. Cabrera & La Nasa, 2000a; Terenzini, Cabrera & Bernal, 2001). Interviewing students in their first year of college means that recollections about college aspirations or factors in the college choice process are less likely to be limited by memory.

Criterion #5

Participants in this study were Arizona residents. The exclusion of non-Arizona residents from the sample recognizes that "the college knowledge of students – the extent to which they understand college admission and placement requirements" (Kirst & Venezia, 2004, p. 24) varies by state context. This selection criterion further recognizes that state policies determine what signals are sent to students about postsecondary education (Kirst & Venezia, 2004) and therefore influence the college choice process (Perna, 2006). For example, state policies regarding K-12 education can influence the likelihood of college enrollment for high school graduates (Perna, 2006). Research also demonstrates that admissions policies at state universities influence students' college enrollment behaviors (Perna, 2006). As a result, out-of-state residents may have had substantially different high school and college choice process experiences than Arizona residents. Therefore, I chose to include only Arizona residents in this study.

Participant Recruitment

Participants were recruited using two strategies, direct e-mailing and e-mails from "key informants" (Bogdan & Knopp Biklen, 2007, p. 231). Following IRB approval, I requested and received directory information (including student name, ASU e-mail, academic major, and college) from ASU's Office of Institutional Analysis for students meeting the following criteria: (1) First Time Freshman; (2) First Generation; (3) Hispanic/Latino; (4) Graduation from Arizona high school in the spring of 2010; (5) Enrolled at ASU Fall 2010 with continued enrollment in spring 2011; and (6) Arizona resident. The university provided directory information for 863 students. I sent all of these students a direct e-mail (Appendix A) via SurveyMonkey inviting them to participate in this study. Each e-mail included a unique link to the Participant Preliminary Questionnaire (Appendix B). I sent a reminder e-mail a week after the first e-mail to students (763) who did not respond by clicking on their unique link or by clicking on the link that would have automatically removed them from my e-mail list. I also sent a reminder e-mail to students (41) who began the Participant Preliminary Questionnaire but did not complete it. One hundred forty-six students responded to the email invitation; 46 students began but did not complete the questionnaire and 100 students submitted a complete questionnaire.

I also used a variation of snowball sampling (Bogdan & Knopp Biklen, 2007) to solicit participation. Snowball sampling, possibly the most frequently used form of purposeful sampling, typically involves asking participants to refer the researcher to other participants (Merriam, 2009). In this study, I identified "key informants" (Bogdan & Knopp Biklen, p. 231) and asked them to forward e-mail invitations to potential

participants (Appendix A). In some instances, they provided the names of other individuals who might know students who met the criteria of interest. The key informants for this study had two characteristics: first, they were all members of the ASU community; second, they were people who were likely to know students who might fit the criteria for inclusion.

Because the West campus was initially chosen as the research site, many of the key informants were from the West campus. As suggested by Patton (2002), an approach I used to locate key informants was to ask my first key informant, the director of the TRIO Academic Achievement Center at ASU's West campus, for the names of ASU West campus faculty and staff who knew a lot about first-year, Mexican American, and/or first-generation students. I sent these people an e-mail explaining "the purpose and focus of the inquiry, the issues and questions under investigation, and the kinds of information that [were] needed and most valuable" (Patton, 2002, p. 321) and requested an informational interview. I arranged a site visit to the West campus and met with four staff and one faculty member. I later spoke over the phone to another staff member who was not available to meet with me during my site visit. The office and departments represented by these staff members included Educational Outreach and Student Services, Student Engagement, and University Academic Success Programs.

The purpose of these meetings was not to collect data. Rather, the primary objective was to "[fill] in many of the gaps in my understanding" (Patton, 2002, p. 316) of ASU in general and the West campus in particular. I had gained some familiarity of ASU and the West campus through public document reviews, including websites and personal communication with former and current ASU faculty and staff, but I wanted to

interview faculty and staff about their experiences, particularly as they related to first-year, Mexican American, and/or first-generation students. The key informants at the West campus were particularly helpful in learning about these student populations at both the West campus and other ASU campuses. The meetings were also helpful in filling in gaps in my knowledge about ASU, learning about perceptions and events that I had not heard about before the site visit, and correcting inaccurate perceptions on my part about ASU and the West campus due to my outsider status.

Two key informants, directors of ASU's TRIO programs at the Downtown Phoenix and West campuses agreed to send a direct e-mail signed by them to TRIO students. Because the eligibility requirements for the TRIO programs on these campuses include first-generation college student status, this made TRIO students an appropriate cohort for sampling. The e-mails to students enrolled in the TRIO Academic Achievement Center program were signed by the TRIO Academic Achievement Center program directors to assure these students that the directors were aware and supportive of the study.

A second group of key informants were student leaders and advisors of ASU student organizations. I searched the ASU Student Organizations website (ASU, n.d.-a) using keywords such as "Latin," "Latino," "Mexican," and "Chicano." I identified a total of 24 student organizations at all four ASU campuses that I thought addressed the needs of Latina/o students and therefore were likely to have a robust listserv. As with the ASU staff and faculty members, I sent them an e-mail (Appendix A) and asked them to forward my recruitment email to their organizations' listserv.

The participant recruitment email sent to student by the key informants included a link that respondents could use to access the Participant Preliminary Questionnaire. Three students responded and completed the questionnaire. However, this does not necessarily mean that this was an inefficient way to recruit participants. Students who closely fit the criteria for inclusion had likely already received a direct email from me inviting them to participate in the study. Students may have gone back to the original email and clicked on their unique link to access the questionnaire.

As an incentive to participate in the study, I entered all students who submitted a completed Participant Preliminary Questionnaire into a raffle to win an electronic gift card from amazon.com worth $50. In addition, students who met the criteria for participation and were selected for and completed interviews received $20 in cash as financial compensation upon completion of each interview. In educational research, the practice of compensating interviewees was adopted from private sector firms who normally pay focus group participants with cash or incentives (Patton, 2002). While there are conflicting opinions as to whether interviewees should be compensated financially, the principle informing the practice, *reciprocity*, is an ethical concern for all qualitative researchers (Creswell, 1998; Patton, 2002).

Patton (2002) explained that researchers should ask themselves, "What's in it for the interviewee? Why should the interviewee participate in the interview?" (p. 408). Reciprocity is what researchers offer in exchange for the stories and perspectives that interviewees provide (Creswell, 1998; Patton, 2002). Although reciprocity does not mean researchers have to financially compensate participants, I believed in paying all interview participants, who may have needed the money for expenses associated with

being a college student. Regardless of how they chose to spend the money, however, their input was valuable for this study; therefore, it was appropriate to pay participants for their time. However, I explained to the participants who were interviewed that "although they [were] being paid for their time, they [were] NOT being paid for their responses and should be as candid and forthright as possible" (Patton, 2002, p. 413).

All students who expressed interest in participating in the study were asked complete the Participant Preliminary Questionnaire first. The information solicited in the questionnaire reflected the list of criteria essential to the study. With the intention of identifying first-generation students who had an older sibling, I selected students for interviews if they met the criteria for participation and were interested in being interviewed.

The original design for this study called for an examination of the college choice process of students who had an older sibling who had attained a bachelor's degree. Some research has shown that students whose parents have some college experience, but not a bachelor's degree, do not have an advantage over those whose parents have no postsecondary education, in terms of the likelihood of enrolling in postsecondary education (Choy, 2001). Therefore, the original design was guided by the assumption that for students to gain the most benefits from having a sibling with college experience, the sibling had to have a bachelor's degree. Data from the Participant Preliminary Questionnaire revealed that 21 of the 100 respondents who submitted a completed questionnaire had an older sibling who had earned a bachelor's degree or higher. I contacted all of these students by email and/or phone in the order in which they submitted a completed questionnaire but I was not able to recruit 12 participants, a number that

previous research studies (Cohen, 2009; González et al., 2003) proved allows for redundancy (saturation) (Merriam, 1998) and "reasonable coverage of the phenomenon" (Patton, 2002, p. 246). Consequently, guided by the literature on the effects of parental education and the college choice process, I expanded the inclusion criteria to students who had an older sibling with an associate degree, students who had an older sibling enrolled at a four-year university; and students who had an older sibling who had completed some coursework at a four-year university. After expanding the inclusion criteria, I went back through the list of 100 respondents and contacted students who met the expanded criteria for inclusion in the order that they submitted a completed questionnaire. I scheduled interviews with more than 12 students anticipating that some students could change their mind about participating and not show up for their interview.

I interviewed 17 students to reach a point of saturation, or redundancy, in the themes and issues identified by the participants. Redundancy occurs when no new information is forthcoming from new participants (Merriam, 1998). While this study could have been completed with a larger sample, choosing a smaller sample size preserved the richness that comes from focusing on relatively small samples. As Patton (2002) explained, "the validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information richness of the cases selected and the observational/analytical capabilities of the researcher than with sample size" (p. 245).

<div align="center">**Data Collection**</div>

Merriam (1998) maintains that "understanding a case in its totality . . . mandates both breadth and depth of data collection" (p. 134). To achieve this balance I employed two data collection techniques – a questionnaire (Appendix B) and interviews

(Appendices C and D). I designed a questionnaire and interview questions for the purpose of obtaining information about students' college choice process. I also reviewed public documents relevant to understanding ASU.

Participant Preliminary Questionnaire

I used an electronic questionnaire constructed specifically for this study to gather background/demographic data from the participants. I asked all students who expressed interest in participating in the study to complete this questionnaire. Prior to beginning the questionnaire, respondents had to read a consent form page and consent by checking a box next to the statement "I Agree/Consent" to continue. The information solicited in the questionnaire reflected the list of criteria essential to the study. In addition to gathering background/demographic data from the participants, I also used the questionnaire to confirm that students who completed the questionnaire met the criteria for inclusion in the study.

Interviews

Interviews were the primary source of data for this study. Semi-structured interviews were conducted with 17 first-year Mexican American students. Semi-structured interviews, with a mix of more- and less-structured questions, are commonly used in qualitative investigations when specific information is wanted from all of the participants (Merriam, 1998). Most of the interviews were guided by the list of questions in the interview guide (Appendices C and D), but new and/or follow-up questions were formulated during the interview in response to participant answers or new ideas on the topic that emerged during the interview (Merriam, 2009).

Guided by the theoretical frameworks and informed by the literature review, I created the first interview guide (Appendix C) with questions designed to gain an understanding of the factors that each student perceived as having influenced their college choice process. The interview guide was purposely designed to gain information about the impact of familial, social, and academic factors on the college choice process. I identified a number of factors (e.g. parental influence, role of peers, information networks) that helped inform the design of the interview guide. The following table presents a sample of the questions in the first interview guide and concepts from the theoretical frameworks as they corresponded with the interview questions.

Question	*Theoretical Framework*
Who had an influence on your decision to go to college?	Hossler and Gallagher's three phase model of college choice: Predisposition phase

How did [Influence] teach you about college and help you get information about college?	• Hossler and Gallagher: Search phase
	• Perna's proposed conceptual model of student college choice:
	   ○ Cultural capital: Cultural knowledge
	   ○ Social capital: Information about college; Assistance with college processes

If not mentioned, probe for: (a) family (inc. sibling(s) with college experience; (b) high school (inc. teachers and counselors); and (c) peers. *How did your _____ influence where you applied?*	• Hossler and Gallagher: Choice phase
	• Perna:
	   ○ Social Capital: Assistance with college processes
	   ○ School context

First interviews occurred over a span of one week. These interviews were face-to-face and lasted 45 minutes to one and a half hours. The purpose of this interview was to begin to understand students' college choice process. Students were interviewed a

second and final time over the phone approximately three months after the first interview. The purpose of this second interview was to make inquiries about "things [that didn't] quite make sense" (Patton, 2002, p. 383), follow up on something said during the first interview, and review with the student ideas and interpretations that emerged following the first interview. An additional interview protocol was designed for each student for this second interview (Appendix D).

I recorded each interview and had them professionally transcribed. After each interview, I guaranteed the quality of the data (Patton, 2002, p. 383) by making sure that it was "useful, reliable, and authentic" (Patton, p. 384). To do this, I first listened to the interview recording and wrote a post-interview memorandum to document any additional "interpretations, thoughts or ideas" (Patton, 2002, p. 383) that were not captured in the interview notes. Second, interview transcripts were reviewed "to make certain that they [made] sense" and "to uncover areas of ambiguity or uncertainty" (Patton, 2002, p. 383). Third, participants were e-mailed their interview transcripts within a month of their interview so they could review and verify the accuracy of their transcript and, if they wished to do so, offer any clarifications or additional information. The transcripts also included inserted short-answer questions that asked the participants for clarifying or additional information. I asked participants to return transcripts via e-mail within two weeks of receiving their transcript.

Prior to beginning the first interview, I asked participants to complete a consent form (Appendix E). First interviews took place in a private location at ASU; students were asked to select a quiet, private location for the second telephone interview. All interviews occurred at a time that was convenient for students. To increase

confidentiality, I encouraged participant to select a pseudonym during the first interview that I used throughout the rest of the research study.

Document Review

In addition to collecting survey data and interviewing each participant, I also used document review as a strategy to gather supplemental data. Merriam (2009) refers to documents as "ready sources of data. . . . relevant to the study at hand" (p. 139). Documents reviewed for this study included ASU'S official fact book; the "Frequently Asked Questions" website of the Downtown, Polytechnic and West campuses; the Home pages and TRIO websites of all four campuses; the websites of Undergraduate Admissions and University Housing; enrollment data; and the ASU News website. These online, public documents were useful in providing descriptive information, offering historical understanding, and tracking changes and development (Merriam, 2009) at ASU. Throughout the data collection process, I also used public documents to confirm, explore, and scrutinize what participants told me during interviews.

In addition to reviewing public documents online, I also collected newspapers and other student publications when I conducted the site visit to the ASU West campus and later when I returned to ASU to conduct interviews with the participants. These newspapers and student publications were helpful in developing a deeper understanding of ASU and the student experience. In a qualitative case study, familiarity with "the context of the study, or where the study took place" (Merriam, 2009, p. 246), is especially important because, according to Merriam, a case study report requires writing a detailed description of the setting.

Prior to data collection, I obtained ASU's most recent First Year Student Survey (ASU Office of Evaluation and Educational Effectiveness, n.d.). This survey provided some information about the college choice process of ASU first-year students. However, the findings were not broken down by race and no information was provided on the response rate for Latina/o, Mexican American, or first-generation students (ASU Office of Evaluation, 2006). However, this survey was useful because I gained some perspective prior to data collection concerning first year students' reasons for attending ASU, early experiences, and expectations.

Data Analysis

Qualitative data analysis is a process of systematically searching and arranging relevant qualitative data that the researcher accumulated to come up with findings (Bogdan & Knopp Biklen, 2007). It is a type of classification system, where emerging regularities and patterns become the categories into which data are sorted (Merriam, 1998). The process involves the identification of themes, or categories, through careful review and reading of the data (Bogdan & Knopp Biklen, 2007; Merriam, 2009).

I chose a hybrid approach for analyzing the qualitative data. The approach was hybrid because it incorporated both a data-driven inductive approach and an existing framework-driven deductive approach (Patton, 2002). A hybrid approach complemented the research questions by allowing the theoretical concepts from Hossler and Gallagher's (1987) three phase model of college choice and Perna's (2006) proposed conceptual model of student college choice to be central to the process of deductive analysis while allowing for patterns, themes and categories to emerge from the data using inductive coding.

Inductive coding involves searching for substantive patterns in the data and developing coding categories for these patterns prior to data interpretation (Bogdan & Knopp Biklen, 2007; Merriam, 1998). A "good code" is one that reflects the purpose of the research and is exhaustive, mutually exclusive, sensitizing and conceptually congruent (Merriam, 1998). Coding data organizes the data so that the researcher is then able to identify themes and develop categories from the data. Patton (2002) defines themes as the "core meanings found thorough . . . analysis" (p. 453).

In addition to an inductive analysis approach, I also used a deductive approach. A deductive approach involves analyzing the data using codes as a guide. These codes were applied to the interviews to organize the data for subsequent interpretation. When conducting deductive qualitative analysis, a researcher defines the codebook (Appendix F) before commencing analysis of the data. For this study, I developed the possible categories, patterns and themes included in the codebook based on the research questions, the theoretical frameworks, and the review of the literature.

Following the data collection, I entered data into NVivo, qualitative research software. NVivo does not analyze the data for the researcher, but rather provides a way to classify, sort and arrange the data so that it is accessible to the researcher (QSR International, n.d.). Electronic copies of all materials, including interview recordings and transcripts, were imported into NVivo and organized into folders. Furthermore, I imported interview notes and post interview memorandums into NVivo as supplemental data. I did not import public documents available via the Internet into NVivo. Instead, for online documents relevant to the study I created bookmarks in Google Chrome (also called favorites in Internet Explorer) and put all of the bookmarks into one folder. I also

organized electronic documents available via the Internet using EndNote Web, a Web-based reference organizer. I kept the newspapers and other student publications I collected while at ASU in a paper file folder.

After I imported all electronic data into NVivo, I undertook a comprehensive process of identification of themes and data coding. This process is described as a systematic, step-by-step process in the next section of this chapter. Nonetheless, the data analysis was an iterative and reflexive process. A characteristic of qualitative research is a continuous association between data collection, searching for patterns and developing ideas about the findings (Bogdan & Knopp Biklen, 2007; Merriam, 1998). Ideally, these processes are concurrent and are "more or less completed" (Bogdan & Knopp Biklen, 2007, p. 160) at the same time. It is also customary to do basic analysis as the data are being collected and conduct a more formal and intensive analysis once all the information about a case is brought together (Bogdan & Knopp Biklen, 2007; Merriam, 1998). In this study, the latter approach was employed. Some analysis took place during data collection. For example, I continuously made judgments about which ideas and themes to pursue with participants during interviews: what follow-up questions to ask; and when to deviate from the interview guide to pursue topics brought up in the interview. All of these types of decisions were based upon analysis of participants' interviews before all the data were collected.

The further intensive analysis necessary for the construction of categories or themes occurred largely after interviewing was complete and all interview transcripts were available for review, reading, and coding. The data sources for this study consisted of the transcripts from the two participant interviews, questionnaire responses, interview

notes, public documents, and post-interview memorandums I wrote during the course of data collection. In these memorandums, I documented the data analysis that occurred as data were being collected and included such information as "reflections, tentative themes, hunches, ideas, and things to pursue" (Merriam, 1998, p. 161) that were derived from an interview. It is important to note that questionnaire responses, interview notes, documents, and post-interview memorandums were not coded because they were used to supplement data gathered through interviews.

The primary objective for data analysis was to create as comprehensive a picture as possible of the college choice process of a group of Mexican American first-generation students. The theoretical frameworks guided the entire analysis. The theoretical frameworks of Hossler and Gallagher's (1987) three phase model of college choice and Perna's (2006) proposed conceptual model of student college choice were applied to the data. The theoretical frameworks alerted me to instances of the college choice process, variations of the college choice process, the absence of the college choice process, and findings that were not part of the college choice process. Put differently, the theoretical frameworks were sensitizing (Patton, 2002) because their concepts helped me make sense of and present the participants' narratives.

Data Coding Process

Step 1: Developing a codebook. The choice of a codebook (Appendix F) for the study was important because it served as a data management tool for organizing segments of similar or related text to assist in interpretation. The codebook was developed based on the research questions, the theoretical frameworks and the review of the literature. Consistent with Hossler and Gallagher's (1987) three phase model of college choice,

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three general codes were included for college choice: predisposition, search and choice

(A. F. Cabrera & La Nasa, 2000a; Hossler & Gallagher, 1987; Hossler et al., 1999).

Likewise, consistent with Perna's (2006) proposed conceptual model of student college

choice, three general codes were included for college choice influences: social capital,

cultural capital and school context (Perna, 2006).

In this study, I wrote and identified codes by a code label, a description of the

code, examples of when the theme occurs, and sample responses identified from previous

research. As an example, some of the codes relating to Hossler and Gallagher's (1987)

model appear below.

Label	Definition	Examples	Sample Response
Predisposition	Students determine whether or not they would like to continue their education beyond high school (Hossler & Gallagher, 1987, p. 209)	Student: plans to go to college; considers going to college; never seriously considered not going to college (Hossler & Gallagher, 1987, pp. 211-213).	*"I knew that if I wanted to go into medicine or if I just wanted a higher education, [I knew] that I would have to go to college"* (Ceja, 2001, p. 102)
Search	Students gather information about institutions of higher education. Searching for the attribute values which characterize the college alternatives. May also entail learning about and identifying the right attributes to consider. Students formulate the "choice set," the group of institutions to which they will actually apply	Student narrows the geographical range and the quality of the institutions he or she considers. Reliance on high school counselors for advice. Applying for financial aid. Student limits the number and types of institutions. Student eliminates institutions (Hossler & Gallagher, 1987, p. 215)	*"We were resourceful enough to visit all the schools I was applying to"* (Contreras-Godfrey, 2009, p. 83).

	(Hossler & Gallagher, 1987, p. 209)		
Choice	Deciding which college or university to actually attend (Hossler & Gallagher, 1987, p. 209).	Student compares the academic and social attributes of each college they have applied to and seeks the best value with the greatest benefits (Hossler et al., 1999, p. 150).	*"I couldn't apply to USC, and if I was accepted I wasn't able to pay the semester cost of books and tuition because of my [low-income] financial status"* (P. A. Pérez, 2007; p. 113).

After creating the codebook, I entered all of the information from the codebook into NVivo. Additionally, in accordance with the research questions and the literature, three specific codes – family, peer, and school context – were included for each stage of the college choice process. In NVivo, I was able to organize categories (referred to as a "nodes" in NVivo) in hierarchies, moving from general categories at the top (the parent node) to more specific categories (child nodes). I created the following parent and child nodes in preparation for coding:

- Predisposition
    - Family
    - Peers
    - School Context (Teachers and Counselors)
- Search
    - Family
    - Peers
    - School Context (Teachers and Counselors)
- Choice
    - Family
    - Peers
    - School Context (Teachers and Counselors)
- Social Capital
- Cultural Capital

Step 2: Placing data into categories and inductive coding. Using the deductive analytic technique (Patton, 2002), I applied the codes to each of the transcripts with the intent of identifying meaningful segments of data. In NVivo this is done by selecting the text you want to code and dragging and dropping the selected text on a code (referred to as a node in NVivo).

Data analysis at this step was guided by, but not confined to, the codes developed prior to data collection. During the coding of the transcripts, codes developed inductively were assigned to pieces of data that described new categories, patterns or themes (Patton, 2002). These additional codes were either completely different from the codes developed prior to data collection or they were a subcategory of a code from the codebook. For example, I created additional child nodes, including an *Other* child node for the *Predisposition, Search,* and *Choice* parent nodes. I also created additional parent nodes, such as *Family, First-Year Experience,* and *Living on campus*.

Step 3: Within-case analysis. In a multiple case study, the first stage of analysis is the within-case analysis, in which each case is first treated as a complete case in and of itself (Merriam, 2009). To present my findings, I wrote individual participant profiles (or case reports) for each of the 17 participants to convey what Merriam calls "a holistic understanding of the case" (p. 204). As Merriam observed, in case studies "conveying an understanding of the case is the paramount consideration in analyzing the data" (p. 203). I presented data separately about each case so that the reader could learn as much as possible about the college choice process of each participant.

Step 4: Cross-case analysis. The second stage of data analysis in multiple case studies is the cross-case analysis, in which the researcher seeks to build generalizations

across the cases (Merriam, 1998). According to Yin (2008), "the goal is to build a general explanation that fits each individual case, even though the cases will vary in their details" (Yin, 2008, p. 142). I used NVivo to facilitate my analysis.

In NVivo, all of the references for a particular code are gathered into a container called a node. I explored the content of each node that was relevant to the research questions. I would open up a node and see all the coded references for that node in one place. I was also able to see how many times I coded text at this code in the reference and the percentage of the reference that was coded at that node. As an illustration, below is a portion of the open child node *Community College* (parent node: *Search).*

<u>\<Internals\\\[File Name]\></u> - § 2 references coded [0.09% Coverage]

References 1-2 - 0.09% Coverage

I just didn't see a community college.

<u>\<Internals\\\[File Name]\></u> - § 6 references coded [3.77% Coverage]

Reference 1 - 0.74% Coverage

After seeing her not finish, and seeing my other sibling who did get her associate's, it took her maybe three, or three and a half years, I knew that I wanted to go straight to a university because I didn't want to go and get stuck there. That's, that really had me dead set on, "I'm going to a university. I can't stay here and get stuck." That is mostly why I decided to go straight to university.

Reference 2 - 0.24% Coverage

after seeing what my siblings did, I don't even know if half of them are going to even do anything else after two years there.

Reference 3 - 0.39% Coverage

I don't remember if my mom did or not. It was mostly just because of my sisters that I didn't do that.

The ability to see all the coded references for a code (node) in one place allowed me to check for themes and explore the way participants were expressing a particular concept. At this point, I was able to move to explaining and outlining findings in relation to the theoretical frameworks, literature, implications, and applications, in addition to making the findings understandable and showing why the findings were important (Bogdan & Knopp Biklen, 2007).

In summary, in this section I provided the steps that were involved in the process of data analysis and described an approach that demonstrate rigor (Merriam, 2009) in the analysis of the data. I outlined a detailed method of data analysis using a process of coding that involved a balance of deductive coding (data were analyzed according to the theoretical frameworks) and inductive coding (discovering patterns, themes and categories in the data) (Patton, 2002). Through this process, it was possible to identify clearly how categories or themes were generated from the data to develop ideas about the college choice process of the participants. This thorough description of the steps in data analysis shows other researchers how they may replicate this qualitative study. In addition, providing a detailed account of the methods, procedures, and decision made during data analysis shows that there has been rigor in carrying out the study (Merriam, 2009).

Internal Validity, Reliability, External Validity and Ethics

When analyzing and reporting qualitative data, qualitative researchers must deal with *internal validity*, how well research findings match reality; *reliability,* whether the results are consistent with the data collected; *external validity,* the extent to which the findings can be applied to other situations; and *ethics*, conducting the study in an ethical

manner (Merriam, 1998). It is important to acknowledge that since some qualitative

research in recent years moved to new language (Patton, 2002), some people may be

more familiar with the terms trustworthiness and rigor (Merriam, 2009). Because this

study followed Merriam's (2009) outline for a qualitative research study design, I use

Merriam's terminology of validity and reliability. I begin this section by outlining the

strategies that I employed to ensure validity and reliability and conclude with the ethical

considerations that arose in this study.

Internal Validity

Merriam (2009) argues that "internal validity deals with the question of how

research findings match reality. . . . that is, are the findings *credible* given the data

presented?" (p. 213). Merriam (1998) offers six strategies to enhance internal validity in

qualitative research: triangulation; member checks; long-term observation; peer

examination; participatory or collaborative modes of research; and researcher's biases.

Four of Merriam's suggested strategies were used to enhance the internal validity of this

research: triangulation, member checks, peer examination and clarifying the researcher's

biases.

Triangulation. Triangulation involves "using multiple investigators, multiple

sources of data, or multiple methods to confirm the emerging findings" (Merriam, 1998,

p. 204). Data for this study was collected from four sources: a questionnaire, participant

interviews, interview notes, public documents, and post-interview memos, as outlined

earlier in this chapter. Using more than one data collection method strengthened the study

because the use of more than one data source in a study allows for cross-data validity

checks (Patton, 2002).

As an example, 11 of the 17 participants were awarded financial aid through ASU's Obama Scholars Program, a financial aid program that provides funding for direct costs of attendance to Arizona freshmen from families that earn less than $60,000 (ASU, 2012). Before I began data collection, this program was unknown to me. When participants revealed that they were Obama Scholars Program recipients, I asked them about the program, including questions about eligibility requirements, renewal criteria, and covered expenses. Participants gave different responses to these questions. Therefore, I had to seek out and review an additional source of data, public university documents, to confirm, explore, and scrutinize what participants told me about the program during interviews.

Member Checks

Member checks involve "taking data and tentative interpretations back to the people from whom they were derived and asking them if the results are plausible" (Merriam, 1998, p. 204). As noted before, member checks were done in this study by sending transcripts to each of the participants to offer them the opportunity to review their transcripts for accuracy and to correct any statements. The transcripts also included tentative interpretations, inserted electronically as comments next to words or lines of texts. The students were encouraged to respond to these comments. For example, the following comment was inserted in one student's transcript: "You think it's a mistake to make the decision to go to a school just because your friends are going there? Is that right?" I reviewed the students' responses and considered them continuously throughout the study (Merriam, 1998).

In addition sending transcripts to the participants, I solicited feedback from the participants regarding their profile. I sent them their profile via e-mail and explained to them that in their participant profile I had attempted to give a brief overview of the process by which they decided whether and where to go to college. I told them that the profile would appear in the finished dissertation and because I wanted to ensure that I was presenting them and their story accurately, I wanted them to review the profile and let me know if anything in it was inaccurate. Most of the participants responded that I had accurately represented them and their story but a few pointed out a misinterpretation or misunderstanding. Accordingly, I revised the participant profiles as needed based on participants' feedback.

Peer Examination

Peer examination (or peer review) involves "asking colleagues to comment on the findings as they emerge" (Merriam, 1998, p. 204). For this study, I asked a recent Ph.D. graduate of the College of Education at the University of Maryland who is Mexican American and a first-generation student to serve as a peer examiner. In addition to her personal background, she was knowledgeable about the topic and the methodology because she conducted a qualitative research study on Latina first-generation college students for her dissertation.

I began by familiarizing her with the study, which included sharing the purpose of the study, the interview guide, and the codebook. I then asked her to read and review the interview transcripts, the participant profiles, and provide comments on chapter five (Findings and Analysis), and chapter six (Summary and Conclusions). To assess whether the findings were plausible based on the data (Merriam, 2009), I instructed the peer

reviewer to ask herself, "How congruent are the findings with reality? Do the findings capture what it really there?" (Merriam, 1998, p. 201) and offer feedback framed around the answer to these two questions.

Clarifying the Researcher's Biases

According to Merriam (1998), both the readers and the authors of case studies need to be aware of researcher biases that can affect the study. One way to accomplish this awareness is for the researcher to use the strategy of clarifying the researcher's biases, or "clarifying the researcher's assumptions, worldview, and theoretical orientation at the outset of the study" (p. 205). Clarifying the researcher's biases helps both the reader and author understand how the author's assumptions, worldview, and theoretical orientation influenced the way the researcher interacted with and interviewed participants, coded the data, analyzed and described the findings, and reported the results (Merriam, 1998). In the following section I discuss my interest in this topic, thereby identifying important researcher biases, and include a brief discussion of maintaining an awareness of these biases throughout the study.

Researcher biases. My interest in this subject stems primarily from my personal background. My two youngest siblings are twelve and fourteen years younger than I am; one recently earned a bachelor's degree and one is a third-year student at a four-year university. Our parents are Mexican immigrants who did not go to college. The combination of my personal background and professional work with Latina/o college students led me to wonder what the college choice process is like for students who, like my siblings, do not have parents that went to college but have an older sibling with college experience. I believe that the college choice processes of my siblings were

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affected in positive ways by my role as an active participant in their college choice processes. Unlike other Latina/os whose parents did not go to college, my siblings knew they had someone they could call on if they needed information about college or assistance with college-related tasks. This awareness of my role as a source of information and assistance during their college choice processes led to an interest in researching this topic. My experiences helping my siblings during their college choice processes were important, and my goal was to explore the college choice process of other younger siblings and help them successfully transition through the college choice process by means of the application of the study's findings.

Being an older sibling is an important component of my identity and even today affects every aspect of my relationship with my two youngest siblings. Because I was the only sibling who attained a college degree, when my siblings were in grade school, I took on the responsibility of ensuring that they also attended college. Although my parents never charged me with this responsibility, I felt that I should help my siblings understand the college choice process at an early age by acting as their first source of information about college, a function that my parents were not able to perform. I wanted to ensure that my siblings would be more informed than I was at their age when they had to make decisions about college. Consequently, I engaged in "helicopter sister" behaviors when they were in middle school and high school. I've adapted the term "helicopter sister" from "helicopter parent," a term for a parent who is over involved with their child's experiences and problems, particularly at colleges and universities (Cutright, 2008). To that end, I was greatly involved in their school experiences and problems to ensure that my siblings enrolled in a four-year college or university.

Despite my parents' expectations that my two youngest siblings attend college, for the most part, they were not able to assist them with preparing for college. However, they did insist that receiving anything less than an "A" in a class was unacceptable. My parents also talked to them about the benefits of attending college and paid for college-related expenses, such as ACT and college application fees. As a result of my parents' inability to provide substantial assistance with college processes, I was the one who contacted guidance counselors to ensure that my siblings were enrolled in college-track courses, flew back home to take them on college visits, insisted that they apply to multiple four-year institutions, and compared financial aid offers from colleges and universities.

As my two youngest siblings progressed through the college choice process, different issues arose. Planning for their college attendance highlighted the differences between the abilities of my parents, who do not have a college education, and my abilities to become involved in school matters, discuss college plans with my siblings, and even save for college (A. F. Cabrera & La Nasa, 2000a). My parents helped with college planning by completing tasks as requested by me but because of their limited knowledge, I had to manage many aspects of the college choice process. This role reversal occasionally led to frustrating situations. At times I wished I had college-educated parents so that I would not have to explain once again to a guidance counselor why it was me, and not my parents, who was calling to talk about my siblings' course placements. "Check the file, there's a letter from my Mom in there saying you can talk to me," I would repeat with a frustrated sigh.

Siblings are an important element of family life in Mexican American households. Research on the characteristics of Mexican American youth and families often highlights cultural values, beliefs and practices that promote close relationships between siblings (Updegraff et al., 2006). Specifically, Updegraff et al. contend that *familismo,* with its *"*emphasis on family support and loyalty and on interdependence on family members . . . means that sibling relationships may be an especially influential part of children's and adolescents' lives in [the Mexican American family]" (Updegraff et al., 2006, p. 512). This emphasis on family loyalty and support is another reason for why I was heavily involved with my youngest siblings' college choice process. Sibling support and assistance may have a different meaning in other cultures (Sanders & Campling, 2004). However, among Mexican American families where older siblings are expected to assist younger siblings (Azmitia et al., 1994; Kiyama, 2008), older siblings may feel the need to support their siblings with enrolling in college.

Successfully assisting my youngest siblings through the college choice process was a sometimes frustrating, but more often positive experience for me. My own experience provided me with a valuable perspective about the potential positive influence of older siblings on the college choice process. In addition to my own experiences, I have met other Latina/o and Mexican American older siblings like myself. Casual conversations about educational aspirations we about our younger siblings usually evoked similarities about the college planning activities they had facilitated, or were facilitating, for their younger siblings. Despite the anecdotal evidence provided by these older siblings, I was interested in the younger sibling perspective. To what extent would

younger siblings say that their older siblings were influential in their college choice process?

Nevertheless, it was important to approach this study with the assumption that each participant in the study would have their own experiences and that they might not match my experiences. Since I was entering into this study with biases, I constantly needed to be aware of how these biases might create a disposition toward findings that supported my views and may cause me to overlook or "play down" findings that were less favorable or less supportive of the expected findings. My awareness was supplemented with member checks and peer examinations.

Reliability

To ensure that results were reliable, or consistent with the data collected, I used three techniques: clarifying the researcher's position, triangulation, and establishing an audit trail (Merriam, 1998). *Clarifying the researcher's position* "involves explaining the assumptions and theory behind the study, [the researcher's] position vis-á-vis the group being studied, the basis for selecting informants and a description of them, and the social context from which data were collected" (Merriam, 1998, p. 207). *Triangulation* involves "using multiple investigators, multiple sources of data, or multiple methods to confirm the emerging findings" (Merriam, 1998, p. 204). The *audit trail* involves "describing in detail how data were collected, how categories were derived, and how decisions were made throughout the inquiry" (Merriam, 1998, p. 207).

In terms of clarifying the researcher's position, I explained the assumptions and theory behind the study in chapter two by reviewing the relevant literature and identifying the theoretical frameworks. I explained my position vis-á-vis the group being

studied in the "Researcher biases" section of this chapter and outlined the basis for

selecting participants and provide a brief description of them in the "Sample Selection"

section of this chapter. I will provide a more thorough description of the participants in

the following chapter. Finally, I discuss the context from which data were collected in

the "Researcher Site Selection" section of this chapter. In addition to clarifying the

researcher's position, in this chapter I presented a discussion of triangulation in a section

titled "Triangulation" and I established an audit trail by describing in detail in the "Data

Collection" section how I collected data, explaining how I derived categories in the "Data

Analysis" section, and describing throughout the chapter how I made decisions during the

study.

External Validity

A qualitative case study's external validity refers to "the extent to which research

findings of one study can be applied to other situations. That is, how generalizable are the

results of a research study?" (Merriam, 2009, p. 223). The purpose of generalizability in

qualitative research is not to find out what is generally true of the many (Merriam, 2009).

In qualitative research, one way to think about generalizability is to think in terms of

working hypotheses (Merriam, 2009). Therefore, the findings of this study are

"hypotheses that reflect situation-specific conditions in a particular context" (Merriam,

2009, p. 225). These findings may be applicable to students and/or institutions with

similar characteristics (Merriam, 2009), but students' contexts need to be taken into

account when making decisions about how to apply the findings.

To enhance the possibility of generalizability, I relied on: (1) rich, thick

description; (2) a description of how typical the students in this study were compared

with other students; and (3) the use of several cases (Merriam, 1998), giving careful attention to selecting the study sample (Merriam, 2009). The rich, thick description provides "enough description so that readers [are] able to determine how closely their situation matches the research situation, and hence, where findings can be transferred" (Merriam, 1998, p. 211). A description of how typical the students in this study were compared with other students allows readers to make comparisons with their own circumstances (Merriam, 1998). Using several cases allows "the results to be applied by readers to a greater range of other situations" (Merriam, p. 212). Finally, selecting a study sample because of its uniqueness (e.g., first-generation, but not the first sibling to attend college; enrolling in a four-year university after high school) was important because it was likely that something could be learned from the sample, "something that contributes . . . to the . . . accumulation of knowledge" (Merriam, 2009, p. 228). In other words, "every case is, in certain aspects, like all other cases, like some other cases" (Wolcott, 2005, as quoted in Merriam, 2009, p. 228).

Ethics

Ethical problems in case studies are most likely to occur during data collection and reporting the results (Merriam, 1998). With regard to the data collection technique of interviewing, Merriam writes that interviewing carries risks to the participants because "respondents may feel their privacy has been invaded, they may be embarrassed by certain questions, and they may tell things they had never intended to reveal" (Merriam, 1998, p. 214). Reporting the results can raise ethical difficulties when trying to protect the identity of the people involved (Merriam, 1998).

In this study, the major ethical challenge was to protect the identities of the participants. Protecting the identities of participants was not excessively difficult given that the participants were not part of an identifiable group. Participants may be just 17 of the over 863 students identified by ASU as: (1) Full-time freshman; (2) first-generation; (3) Hispanic/Latino; (4) Arizona resident; (5) graduated from an Arizona high school in spring 2010; and (5) enrolled at ASU in fall 2010 with continued enrollment in spring 2011. Still, confidentiality for participants was a concern; I utilized multiple strategies to protect the identities of the participants.

First, I encouraged all of the participants during the first interview to choose a pseudonym for me to use throughout all aspects of the study, including the transcripts and other study documents, electronic documents stored in NVivo, and the finished dissertation. At the end of the second interview, I gave each participant the option of keeping the name they selected during the first interview or choosing a different name. Only I know the true identity of all the participants and the names they selected. Second, participants were informed in the e-mail invitation (Appendix A) and also through the informed consent process (Appendices B and E) that every effort would be made to keep their personal information confidential. The informed consent process included a conversation during the first interview that involved an explanation of the use of pseudonyms and also an acknowledgment that while I would be discussing the overall findings periodically with the peer examiner and co-chairs, I would not be revealing participants' identities and would make every effort to convey the findings in such a way as to minimize the possibility that responses could be linked back to the participant.

I also discussed with the participants the known limitations on confidentiality associated with this study. Limitations on confidentiality included presenting data for individual participants, as opposed to in aggregated form (Merriam, 2009). In addition, students were told that it was likely that they would be identified as attending ASU and that a description of them would be included in the dissertation that could make it possible for someone to ascertain their identity. Finally, to further protect the participants' confidentiality, I coded data sources so that the electronic and paper files had no names on them, stored them in a secure location, and I will destroy them five years from the date of submission of the finished dissertation.

Chapter 4: Participant Profiles

This study utilized a qualitative case study methodology to describe and analyze the college choice process of Mexican American first-generation students who had an older sibling with college experience. The major research question and sub-question guiding this study were:

1. How do Mexican American first-generation students who have an older sibling with college experience describe their college choice process?

   a. What are some of the familial, social, and academic factors that Mexican American students identify as influences on their college choice process?

This chapter provides detailed demographic information for each participant as well as 17 individual profiles (or case studies) (Merriam, 2009). Each profile is based on information gathered through a variety of means, including a questionnaire, face-to-face interviews, and public document review. In addition, the data for each participant is organized around the research questions listed earlier. In other words, the profiles provide answers to the research questions for each participant.

Participant Summary

The criteria for participating in this study included: (1) Mexican American ethnic background; (2) first-generation college student where neither parent has enrolled in college as a degree-seeking student; (3) has an older sibling who has enrolled in college as a degree-seeking student; and (4) graduated with a high school diploma in June 2010 or thereafter. All participants entered Arizona State University (ASU) as first-time freshman in fall 2010. I interviewed 17 participants who met these criteria. The detailed demographic information for each participant is listed in the table below. This

information includes each parent's highest level of education and the education of the sibling(s) that qualified the student for participation in the study. The table also includes financial aid information.

Participants were not asked in the Participant Preliminary Questionnaire (Appendix B) parental income questions because previous research has found that factors other than parents' income make a greater difference in the college decision-making process (A. F. Cabrera & La Nasa, 2000a; McDonough, 1997). Nevertheless, during interviews, 11 participants (65%) revealed that they were Obama Scholars, the name given to recipients of the President Barack Obama Scholars Program, an ASU financial aid program that provides funding for direct costs of attendance for Arizona freshmen from families that earn less than $60,000 (ASU, 2012). Because this financial aid program turned out to be a key factor in students' choice of ASU for enrollment, the information is included in the table.

Table 1

Participants' Demographic Information

Participant	Gender	High School	Obama Scholar?	Mother's Education	Father's Education	Sibling Education
Alex	F	PHM	Y	HS	HS	ASU Jr
Arnold	M	PMM	Y	Less than HS	Less than HS	ASU Soph
Cassie	F	PMM	N	HS	HS	AA/AS
Cindy	F	PHM	Y	Less than HS	Less than HS	1. ASU Jr 2. Previous attendance at a 4-yr university
Edwin	M	PMM	N	Less than HS	Don't Know	BA/BS (ASU)

Erika	M	PMM	Y	HS	Not Applicable	ASU Junior
Evelyn	F	PHM	N	Less than HS	Less than HS	Freshman at a 4-yr university
Genesis	F	PHM	Y	HS	HS	AA/AS
Gloria	F	PMM	N	Less than HS	Don't Know	AA/AS
Kulele	F	PHM	Y	Less than HS	Not Applicable	ASU Sr
Mariela	F	PHM	N	Less than HS	Less than HS	ASU Sr
Michelle	F	PLM	Y	Less than HS	HS	ASU Jr
Nicole	F	PMM	N	HS	HS	1. BA/BS (ASU) 2. CA university
Patrick	F	PMM	Y	HS	HS	BA/BS (ASU)
Roger	F	PMM	Y	Less than HS	Less than HS	BA/BS (ASU)
Victor	M	PMM	Y	Less than HS	Less than HS	BA/BS (NAU)
Victoria	M	PHM	Y	HS	HS	Some College (ASU)

Note. PHM = public, high minority; PMM = public, medium minority; PLM = public, low minority; HS = high school graduate/GED; AA/AS = associate degree; BA/BS = bachelor's degree; NAU = Northern Arizona University.

Eleven participants (65%) were female and six (35%) were male. The sample overrepresented females and underrepresented males because in fall 2010, 55% of the undergraduate Latina/os at ASU were Latina and 45% were Latino (ASU Office of Institutional Analysis, 2010). In addition, in fall 2009, 58% of Latina/o U.S. undergraduates were Latina, while 42% were Latino (ED, IES, & NCES, 2010).

Of the 17 participants selected, all attended public high schools. Additionally, one participant attended a low minority high school (less than 5% Latina/o students); eight attended a medium minority high school (5 to 50% Latina/o students); and seven attended a high minority high school (over 50 percent Latina/o students) (GreatSchools Inc., n.d.; National Assessment of Educational Progress, n.d.). This information is provided in the table as two indicators of the school context. I will present the influence of the school context on the college choice process in chapter five.

Finally, seven of the participants reported having mothers who had earned a high school diploma or GED while seven also reported having fathers who had earned a high school diploma or GED. Although most participants (nine) had mothers who had less than a high school education (which in this study meant that the mother did not go to high school or that she did not complete high school), only six participants responded that their fathers had less than a high school education. Twelve of the 17 participants reported living with both parents prior to enrolling in college.

Next, I present 17 individual participant profiles (or case studies). These profiles include detailed information about each participant's college choice process, with a specific focus on some of the familial, social, and academic factors that participants identified as influences in their college choice process.

Individual Participant Profiles

Alex

Alex attended high school in a city in the southwest corner of Arizona, where he lived with his mother and three younger siblings. Although his father did not live in the home, he had regular contact with Alex. Both of his parents are high school graduates; at

the time that he was applying for college, neither of them was employed due to the economic downturn. Previously, his mother had been a dispatcher for a police department and his father worked checking for produce on the Arizona/California border. Because Alex was a Pell Grant recipient, it is likely that his parents' annual income was less than $40,000 (Supiano & Fuller, 2011). Alex also had an older brother who was a junior at ASU.

The high school Alex attended had 2,300 students, of whom approximately 73% were Latina/o (GreatSchools Inc., n.d.). Alex reported that despite having taken, in his words, "a lot" of Honors and AP courses, he was an average student who stopped caring about his grades his senior year due to "senioritis." He was not involved in any high school or community activities. When Alex was a sophomore in high school, his brother began his freshman year at ASU. This caused Alex to start thinking about his own plans after high school. He did not report talking to anyone about his plans. Alex originally was interested in becoming a lawyer, but in high school he became interested in a career in psychology. Alex explained, "I think psychology goes good with anything. I thought, 'It's a really cool subject and I'm really interested in it.' I want to explore it.'"

For Alex, the most important reason to go to college was to get a job. He believed to get a job, "it's almost mandatory to get a degree." Part of this belief was based on hearing President Obama say that you have to have a degree to get a job. Alex reasoned that in a bad economy with limited jobs, it made more sense to pursue a degree rather than to try to find a job that likely did not exist.

Alex knew that he would need financial aid to pay for a college education, but neither he nor his parents knew much about college expenses or financial aid.

Nevertheless, he was confident that he would receive enough financial aid to go to college because his brother had received enough financial aid to allow him to go to college. Alex also learned about the Obama Scholars Program (this program was not available when his brother began at ASU) and took proactive steps to learn more about the program requirements and application process. Despite his confidence that he would receive adequate financial aid, Alex also got a summer job to pay for any expenses that might not be covered by financial aid. Toward the end of the summer, however, he realized that he had underestimated the indirect costs of college. He shared, "I was looking up all these expenses, like, 'Wow!' They charge you a $250 fee just to go to orientation. That's amazing." When Alex realized that the earnings from his summer job would not cover all of his college expenses, he used a credit card to pay for some of those expenses due prior to enrolling in college. He also took out a student loan to pay for expenses incurred after enrollment. Alex found reasonable the financial contributions he had to make to his college education. He explained that since the government was paying for 80% of his education, he thought it was, as he said, "fine" that he had to pay for the other 20%.

Alex's parents, while supportive of Alex's college plans, did not expect him to pursue a college degree. His parents told him, "You can do whatever you want." Alex reasoned that if he wanted "to be a wrestler or a boxer, or something like that," his parents would have been supportive also. They never spoke to him about college, but when he decided he wanted to pursue a college education, they supported him in every way possible. For example, they made the six hour round trip drive to ASU's orientation.

Alex decided to follow in his brother's footsteps and attend ASU. He did not explore any other college options because he was hesitant to attend a school where he would have no family support. In addition, Alex knew a lot about ASU because of his brother. When his brother started school, Alex went with him and was with his brother throughout orientation because Alex wanted to explore college and see what it was like. Alex referred to his brother often throughout his interview, and he stated that his brother had a strong influence on his college plans.

After high school, most of Alex's friends attended the local community college. Alex, unlike several students in this study, did not think that a community college was inferior to a university. However, he wished more of his friends had chosen to leave their small city for a four-year college. It was important to Alex to leave home to attend a four-year college, despite not wanting to leave his family. One of his friends attended ASU with Alex for the first semester. Alex's friend subsequently withdrew from the university because he was doing poorly in his classes. Alex was disappointed to no longer have his friend at ASU because he and his friend "pretty much did everything together" throughout the college application process. Alex had planned that he and his friend were "going to help each other out" at ASU.

Almost immediately after deciding he would go to college, Alex decided he would attend ASU like his brother and did not deviate from this plan. Alex's brother certainly played a role in the college that Alex considered in that Alex felt it was important to have family at the place he would be attending. However, Alex said he visited ASU to check it out for himself, thereby making a decision that was also based on his own knowledge of ASU.

Arnold

Arnold attended high school in Phoenix, where he lived with his parents. His mother had a grade school education and alternated between being a stay-at-home mom and cleaning houses. His father also had a grade school education and worked for a landscaping company. Like most of the students in this study, Arnold was an Obama Scholar, a scholarship program that had a maximum annual household income limit for parents; to be eligible the combined annual income of his parents had to be $60,000 or less (Supiano & Fuller, 2011). Furthermore, he was also a Pell Grant recipient. Accordingly, his parents' annual income was likely less than $40,000 (Supiano & Fuller, 2011). Arnold had two sisters, an older one enrolled at ASU and a younger one in the sixth grade. He referred to his mother and sister often throughout his interview; he identified them as having the strongest influence on his college choice process.

The high school Arnold attended had almost 1,500 students (GreatSchools Inc., n.d.). Approximately 43% of the students enrolled in his high school were Latina/o (GreatSchools Inc., n.d.). Arnold was involved in a few high school activities, including soccer and French Club. Unlike most of the students in this study, Arnold did not give much thought to his plans after high school nor did he consult with many people about his plans. He did not start thinking about college until his junior year of high school and it was not until twelfth grade, when his sister enrolled as a freshman student at ASU that he made the decision to go to college. He explained, "I wasn't sure about myself . . . I was still at 'I don't know whether I should go or I should not. . . .' I saw her go and I wanted to go after that. I didn't want to get left behind." After talking with

acquaintances during high school that were engineering majors, Arnold eventually became interested in a career in mechanical engineering.

Arnold's mother was very supportive of Arnold's plans. For Arnold and his mother, the most important reason to go to college was to advance his education beyond high school. Other important reasons for Arnold were to get a better job and be better off financially than the people in his neighborhood. For Arnold, the most important college choice considerations were distance from home and the cost of attendance. He knew that financial aid would be necessary to pay for college. He was also interested in living at home while attending college.

Arnold said he had always aspired to attend a four-year university but could not say exactly why. When asked how he learned about different colleges, Arnold explained:

> I did do more research on the state's universities. . . . for some reason, I don't know, I just didn't see a community college. I just wanted to go straight to a four-year. Something was telling me, I had to, I don't know. My mom was telling me, "You might as well go four."

It appeared that Arnold might not have understood the difference between a four-year college and a community college. Arnold said, "Sometimes I didn't see the difference. . . . I guess, I don't know, the university was bigger or something and I decided to go to the university."

Arnold sought information about college by relying on acquaintances, his sister, and college admissions representatives for assistance and guidance. He also looked for information on college websites and accompanied his sister when she made a campus visit to ASU. Arnold also reported receiving mailings and emails from many colleges and universities. He said that the mailings and emails did not influence his college choice and he did not understand why he had received them in the first place.

Arnold was not very knowledgeable about financial aid. Arnold explained that he applied for the Obama Scholars Program because his sister's experience had convinced him that he would also receive funding. He could not explain how the Obama Scholars Program worked, but he knew that it covered his books and tuition. Because he received sufficient financial aid, Arnold did not have to resort to his backup plan: paying for college with scholarships. Arnold believed that because he had received "decent grades" in high school, he could have gotten a scholarship to cover his college expenses.

Arnold's reason for selecting ASU was based on the financial aid award he received. For Arnold, the cost of college was a major concern because he did not expect his parents to pay any of his college expenses. His sister and ASU's location also had an influence on his choice. He knew the most about ASU because his sister had attended ASU and it was not far from his home. His mother supported his choice of ASU because she wanted Arnold to go to the same school as his sister.

Arnold's profile did not fit that of other students in the study. The other students in the study began to form their occupational and educational goals by the time they entered high school. Arnold's lack of goals and limited college planning process was surprising because he was a B student and enrolled in Advanced Placement (AP) courses. The students in this study with similar characteristics – had at least one encouraging parent; older sibling who was in college – were more goal-oriented than Arnold. Moreover, their aspirations were developed a lot earlier in high school than Arnold's.

Cassie

Cassie was the second youngest of four siblings. Her family lived in a city located about 20 miles from Phoenix. Her father was a manager at an auto parts store and

her mother was a stay-at-home mom. Cassie's mother and father both graduated from high school. Her oldest sister attended a community college, but she did not complete a degree. A 22-year-old sister completed an associate degree at the same community college that the oldest sister attended. Cassie did not report her parents' annual income. Nonetheless she was a Pell Grant recipient, making it likely that her parents' annual income was less than $40,000 (Supiano & Fuller, 2011). Cassie was in the top 5% of her high school class and was very active in academic activities and theatre. The out-of-district high school she attended had 1,600 students and was 40% Latina/o (GreatSchools Inc., n.d.).

Cassie began thinking about college as early as the second grade, when a teacher introduced her to the word "university" during a classroom activity, but it was not until she entered high school that she began to plan for college. When she first started high school, Cassie thought she might go to either to a community college or a university. Her parents did not require that she attend college, but they expected that she would continue her education "in some way." In the first half of high school her occupational interests included accounting, finance, "something with math or science," and "something involving kids." Cassie's most important reason for going to college was to get out of the small town that she lived in and make a name for herself. For Cassie's parents, the most important reason for going to college was to get a better-paying job. Cassie indicated that she wanted to attend a school in Arizona. Location and the availability of her major were the two most important criteria for choosing a school. The low cost of attendance was also another consideration.

Although Cassie considered several occupational interests, by her junior year in high school she decided to major in engineering, largely because of her participation in an outreach program supported by the University of Arizona (UA) in affiliation with ASU's Fulton Schools of Engineering. In this program, Cassie participated in activities and competitions focused on science, engineering and math. She also received college and career information; listened to speakers talk about majoring in engineering at ASU or UA; was exposed to various college campuses via competitions, campus visits and field trips; and interacted with students who were also interested in attending college.

Over the course of high school, Cassie's educational plans evolved from a plan to attend either a community college or a university to attending a university. Cassie explained that she had been open to attending community college because both of her sisters had attended community college but once she chose engineering as a major, she decided it would be more beneficial for her to pursue a bachelor's degree rather than an associate degree. She also shared that it would have been "pretty weird" if she went to a community college because everyone in her group of friends was planning to go to a university.

Cassie applied and was accepted to ASU and Northern Arizona University (NAU). Cassie credited ASU's better engineering program, its proximity to home, and her familiarity with ASU through the outreach program with influencing her decision to attend ASU. Financial concerns were also a major factor in Cassie's decision. ASU offered her more financial aid than NAU.

The process that Cassie experienced as she made decisions about college reflected that of several students in the study who entered high school with aspirations to attend

college. These students usually thought a lot about how to get into college. Her need to go to school close to home was also typical of the students in the study. The influence of the outreach program was not surprising since neither of her parents had college experience and neither of her older sisters had university experience.

Cindy

Cindy lived in a border town on the southwest corner of Arizona and attended a high school with a population of 2,400 where all the students were Latina/o (GreatSchools Inc., n.d.). Cindy considered herself to be an average student enrolled in the "regular" curriculum. She had not enrolled in any Honors or AP courses. Her father drove a trailer in which he transported lettuce and her mother, who had not attended high school, was unemployed but had previously worked packaging lettuce. Her father attended school in Mexico through the sixth grade. Cindy did not report her parents' annual income, but she described her parents as low income.

Cindy was the youngest of four siblings: her siblings were 20, 25 and 28 years old. Her 20-year-old sister was a student at ASU. Her 25-year-old sister attended UA for a year but withdrew when she lost her merit-based financial aid; she later completed a medical assistant certificate at a community college. Her 28-year-old brother, after having spent 10 years in the Army, was enrolled at a community college. Cindy's parents were not knowledgeable about college but they strongly encouraged her to attend college after high school and had a strong opinion about where Cindy should go to college. Her 20-year-old sister also strongly encouraged her to attend college. Cindy reported that she talked more to her 20-year-old sister than anyone else about her college plans.

In high school, Cindy aspired to go to college but she did not have many concrete plans for her college education beyond enrollment. Although she had given some thought to possible majors and how far she should continue her college education, she was still ambivalent when interviewed. Cindy's 25-year-old sister, who was unsatisfied with her career, advised Cindy to "study what you're good at" rather than major in something just because it would lead to a well-paying job. As a result, Cindy made the decision to study art education, something that was of interest to her. Still unsure about how far to continue her education, she also talked about pursuing a master's degree. A high school teacher advised her that she would need a master's degree for job security but Cindy did not know whether she wanted to pursue an advanced degree.

Cindy was reasonably knowledgeable about college. In middle school, she visited ASU, UA, and a community college but was not able to make visits to any colleges during high school because her high school required a fee to participate in these college visits. Cindy found the fee to be too expensive for her to participate. Despite this financial roadblock, Cindy garnered information about college from a variety of sources. Based on the college brochures that her school counselor handed her to read, she learned about different colleges and how to apply to them. Also, her high school provided a workshop on filling out the FAFSA and paying for college. She learned about specific colleges and universities from admissions representatives who visited her high school. Her sisters gave her information about the college experience, including information about college expenses and financial aid.

Cindy was somewhat knowledgeable about college costs and financial aid. Because her sisters had qualified for financial aid, Cindy thought she would also qualify

for financial aid. Cindy reported that both her teachers and her sisters had urged her to apply for scholarships but Cindy decided against applying for any because she thought it was too much work, a decision she later regretted. She had to take out a loan for her first year of college and she was concerned about having to repay loans once she finished college.

Initially, Cindy applied to ASU and began an application for UA. However she reported that she received strong messages from her parents to attend ASU. Cindy explained, "They told me to come to ASU because my sisters were here." Cindy's 20- and 25-year-old sisters lived together in an apartment near ASU her parents wanted Cindy to live with her 20-year-old sister and help her pay the bills since her 25-year-old sister wanted to move out of the apartment. When Cindy was considering attending UA, her mother asked, "Where are you going to live?" and "Who are you going to live with?" She told Cindy that if she lived with her sister, in addition to helping her sister with the bills, she would have a safe place to stay. Cindy said she enrolled at ASU because that is where her parents and sisters wanted her to go.

> I felt like my whole family was just there; because I just wanted to go to UA, remember? And my parents were like, "No, you can't leave your sister alone, and stuff." So, that's why I guess I feel like my family influenced me where to go.

Cindy's interview revealed that she learned about college from her middle school teachers, high school teachers, admissions representatives, and sisters. Despite access to information about college, she did not consider many colleges. It appears that her parents were adamant that she attend ASU, thereby limiting where she could go to college.

Edwin

Edwin lived in Phoenix and attended two high schools. During his freshman year in high school, his mother moved further away from his high school. Consequently he had to live with his sister so that he would not have to transfer to a different high school. At the end of his sophomore year of high school, he moved back in with his mother where he attended the high school closest to their home for his junior and senior years. The high school he attended his freshman and sophomore years enrolled approximately 1,200 students and 35% of the students were Latina/os (GreatSchools Inc., n.d.). The high school he attended his junior and senior years had 2,250 students and approximately 12% of the students were Latina/os (GreatSchools Inc., n.d.).

Edwin's mother, who attended high school but did not graduate, had held jobs as a seamstress, factory worker, and most recently as a custodian at a high school. Edwin's father did not live with his mother and him and Edwin did not report his educational attainment or occupational status. Edwin was the younger of two children; his sister was 14 years older than him. She obtained a bachelor's degree from ASU.

In high school, Edwin was enrolled in college preparation courses, taking several Honors and AP courses and he always put great effort toward doing well in his classes. Edwin stated that he wanted to go to college because he did not "want to be a statistic." When asked what he meant by "a statistic," he explained that he "did not want to end up . . . in gangs, a drug dealer, and a high school dropout." His mother also inspired him to attend college; she advised him and his sister to better their lives through education. His mother explained to them that if they furthered their education, they would not have to work as hard as she did.

Edwin reported that during the time he was taking Honors and AP courses, he planned to attend a university because the Honors and AP students "all went to universities." Edwin made plans to attend ASU because his sister was an alumna of ASU. His career interests shifted between medicine specifically and the health care industry in general. In his first year of college, he was still somewhat undecided about his major.

Edwin's mother, although not very knowledgeable about postsecondary education, had opinions about the kind of college that Edwin should consider. She encouraged him to attend a university immediately after high school. Having experienced her older daughter's attendance at a community college and later a university, Edwin's mother believed that there was more prestige in attending a university than attending a community college. Edwin explained that "she sees it as a great honor that her son's going to university." Edwin's sister also encouraged him to attend ASU.

Edwin reported that he did not talk much to anyone about his college plans. His mother talked to him in general about college, but they did not have conversations about the specifics of getting into college. He also did not talk to his sister about college; Edwin talked more to his friends than anyone else about his college plans. His conversations with his friends did not center on whether to go to college and what school to attend. Once he made the decision to attend ASU, he exchanged information with his friends who were also planning to attend ASU.

Despite having an older sister with a bachelor's degree, Edwin had very little exposure to higher education. When Edwin was four years old, his sister joined the U.S.

Army because of the Army programs that could help her pay for college. She began

college by enrolling in a community college, after which she transferred to and graduated

from ASU. Edwin did not talk to his sister about her community college experience and

later when she attended ASU he never visited the campus. Essentially, he did not have

much information about the college experience. Despite this lack of concrete insider

information Edwin did credit his older sister as having some influence on him.

Reflecting on his sister's role in his college choice process, Edwin said, "She expected

[college] from me and it was never if I'm going to college, it was a when."

At Edwin's first high school, the staff did not talk much to students about college.

At the second high school where he attended his junior and senior years, Edwin had a bit

more exposure to information about college because counselors would go to classes to

talk about college. He reported these classrooms visits happened once during his junior

year and twice during his senior year. After these classroom visits, the counselors invited

the students to meet with them individually after school to discuss college plans but

Edwin was not able to take advantage of this opportunity because he had to babysit his

niece after school. As a result, he received very limited information about college. Most

of his information about college came from the three counselor visits to his classes and

the ASU website. Edwin looked for college information on his own, often finding it

difficult to manage this process by himself. He acknowledged that he might have made

some mistakes. Although Edwin believed that attending ASU was the right choice for

him, he also believed that maybe he should have visited ASU before applying.

Edwin had always been primarily interested in attending ASU but he also briefly

considered attending NAU and UA. He had decided that out-of-state schools were not an

option for him because he was not willing to leave his family. He especially did not want to leave his single mother alone. He wanted to be available to her and his sister, should they need his assistance. Once Edwin decided that he was going to go to a school as close to home as possible, he focused on ASU because it is the closest college to his home. He applied only to ASU because he believed that given his grades along with his state residency he would be admitted. Analysis of public documents containing admissions data suggests that Edwin accurately estimated his likelihood of being admitted to ASU. In addition to ASU admitting 87% of all undergraduate applicants, in fall 2010, 65% of ASU undergraduates were Arizona residents (ED, IES, & NCES, n.d.). Also, Edwin's self-reported 3.4 high school GPA was slightly higher than the average high school GPA for fall 2010 ASU first-time freshmen (ASU University Office of Institutional Analysis, 2011).

Edwin had limited information about financial aid. He qualified for the Obama Scholars Program but did not receive an award. Had Edwin received financial aid from this program, he would not have had to pay for his first year at ASU. Instead, Edwin told me: "My papers got lost, deadlines weren't met, and I had to end up paying – I had to end up taking loans to pay for my first year." Edwin expected to pay for all of his college costs. He knew from his sister's experience that his mother was not able contribute financially to his college costs. While he had already taken out a loan to help pay for college expenses, he also indicated that he would be willing to transfer to a community college if there came a time when he could no longer afford ASU.

The interview with Edwin revealed that he learned about colleges primarily from counselor visits to his classroom. As a result, his focus was based on a small number of

schools throughout most of his high school years. The single most important college choice criterion was the proximity to home.

Erika

Erika lived in a city approximately halfway between Phoenix and Tucson and attended a high school with a total student enrollment of 2,500 and a 48% Latina/o enrollment (GreatSchools Inc., n.d.). Erika's parents separated when she was young and she has had no contact with her father since that time. Prior to attending college, she lived with her mother who was a high school graduate and worked as a school custodian.

Erika, the youngest child in her family, had three older siblings: her 21-year-old brother was a junior at ASU; her 24-year-old brother was enrolled at a community college; and her 31-year-old sister completed a medical assistant program at a technical school. Erika did not report her mother's annual income, but since she was a Pell Grant recipient, it is likely that her mother's annual income was less than $40,000 (Supiano & Fuller, 2011).

In high school, Erika enrolled in college preparatory courses. At the urging of her mother, she enrolled in AP courses in the hopes that she would earn college credit. Erika's mother knew about AP courses and their relationship to the college application process from Erika's older brothers, who explained this relationship to her, and from information she received during parent-teacher conferences. Although Erika did not indicate that she thought a great deal about her college plans or that she talked to anyone about her future, in eighth grade she had already decided that she would attend college after high school.

Though she did not report talking to anyone about her future, Erika believed that she received a great deal of support as she made decisions about college from her family and high school staff. Erika's mother, who was unable to attend college after high school, encouraged Erika's aspirations for college attendance. Her brothers, who both had positive college experiences, also expressed their support by telling her, "[High school] isn't it. If you really want to be successful you're going to have to do some form of education after this." In addition, junior high and high school teachers "pushed" Erika, along with her classmates, to attend college after high school.

Most of Erika's information about colleges came from high school and college counselors. The counselors would come to her classes and speak about state universities and local community colleges. Erika did not have much one-on-one interaction with counselors about college. The only time she could recall needing to see a counselor was when she was preparing for the SAT and ACT. She went to see her high school counselor to ask about what scores she needed to get and how she should go about being successful on the tests. Erika also learned about different colleges and universities from brochures she received in the mail from a number of colleges and universities. She also reported that she periodically received information about ASU from her brother, such as how to navigate the ASU website.

Erika did not consider a wide range of institutions. Because she lived in southern California prior to high school, she briefly considered attending college there. Nonetheless, by her sophomore year in high school she already knew she wanted to attend ASU. Her brother was attending ASU and encouraged her to apply there as well. In addition, she loved Tempe, the city where her brother's campus was located. She was

also a fan of the ASU football and basketball teams and thought of ASU as a school with a good reputation and a lot of school pride. Erika's mother supported her decision to attend ASU; she also thought it was a good university and she was happy that Erika would be close to her brother and close to home. Her brothers were also happy and excited that she would be attending ASU.

Erika received information about financial aid from her high school counselors. The counselors encouraged Erika and her classmates to apply for financial aid to help with the costs of college. Erika found out about the FAFSA and about grants and scholarships from her counselors. With her brother's help, Erika completed the FAFSA and as a result was awarded Obama Scholars Program funding.

Erika was uncertain about her career goals throughout her high school years, but her educational goals were certain. As a result, she shifted her career plans more than once throughout high school and college. First she thought she might want to do something in the medical field but later shifted her career plans to education. Erika began at ASU as an Elementary Education major and later in the spring semester of her freshman year she changed her major to Film and Media. Despite her uncertainty about career choice, college attendance and ASU were always primary goals for Erika.

Evelyn

In high school, Evelyn lived with her parents and three siblings in Phoenix. Her mother had a grade school education and was a stay-at-home mom; her father attended but did not complete high school and worked installing marble and granite countertops. Evelyn had an older sister and two younger siblings. Evelyn's older sister, who was two years older than Evelyn, was in her first year at a selective, private university in

Washington, DC. She had gone to college immediately after graduating from high school.

The high school that Evelyn attended had an enrollment of 1,350 students, 53% of them were Latina/os (GreatSchools Inc., n.d.). In high school, Evelyn was enrolled in several Honors and AP courses and mostly received As and Bs. Despite the above average grades, she remarked, "high school wasn't too hard for me so I would always just slack off."

Evelyn's sister and parents encouraged Evelyn to go to college immediately after high school. In high school, when Evelyn began seeing other students apply for college, she began to think about her own educational and career plans. She reported talking to her sister, teachers and counselor about her college plans.

Evelyn decided she would major in chemistry because she liked the subject since middle school. However, she had not decided what she would do with her chemistry major. She reported an interest in being a teacher because of her positive experience with her high school chemistry teacher and also because she participated in an elementary school teaching internship program that was part of a dual enrollment course. Still, Evelyn also contemplated a career in muscular dystrophy research because two of her siblings have the disease.

Evelyn's sister encouraged her to go to the university where she was but Evelyn, who had always been compared to her older sister, had no interest in following her to Washington, DC. Instead, Evelyn considered ASU, Rensselaer Polytechnic Institute (RPI) and UA. She became interested in RPI from a mailing the school sent her but soon decided against applying to RPI because she was afraid that she would not get accepted

into a "really nice school, or something out-of-state." Evelyn felt that she was not as strong a college applicant as her sister had been and she did not want to disappoint her parents if she was denied admission to an out-of-state college. Instead, she applied to ASU and NAU because she learned that she would likely be admitted to a state school. As she had predicted, Evelyn was admitted to both state schools. Analysis of public documents containing admissions data suggests that Evelyn accurately estimated her likelihood of being admitted to ASU and NAU. In addition to ASU admitting 87% of all undergraduate applicants, in fall 2010, 65% of ASU undergraduates were Arizona residents (ED, IES, & NCES, n.d.). At NAU, 66% of undergraduates are Arizona residents (ED, IES, & NCES, n.d.).

Another reason why Evelyn decided against applying to out-of-state schools is that she was afraid she would not be able to afford it. Her sister was able to attend an out-of-state school because she was a Gates Millennium Scholar (GMS). According to the GMS website, this scholarship program provides students with high academic and leadership promise that have significant financial need, a good-through-graduation scholarship to use at any college of their choice (The Gates Millennium Scholarship Program, n.d.). Evelyn reasoned that if she attended a state school, she would be able to afford it by receiving funding from the Arizona Board of Regent's High Honors Tuition Scholarship (AIMS Scholarship). The AIMS Scholarship is a merit scholarship that awards qualified Arizona high school graduates a full in-state university tuition scholarship (Arizona Department of Education, n.d.).

As previously mentioned, Evelyn was admitted into both ASU and NAU; she chose to attend ASU. Her decision was based on the weather in northern Arizona and the

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distance from her home. Specifically, she decided that she did not want to attend NAU because of the colder weather and because she wanted to stay close to home. Evelyn received the AIMS scholarship and she completed her FAFSA in time to be considered for the Obama Scholars Program but her limited knowledge of the financial aid application process caused her to miss ASU's deadline for submitting a required document for financial aid verification. Evelyn was required to submit a "Student Financial Information Verification" form (ASU, 2010c); she incorrectly assumed that since she had no additional financial information to report, she did not have to return the form. By the time she learned that she had to return the form despite having no additional financial information to report, she had missed the deadline and was no longer eligible for the Obama Scholars Program.

Like many students in this study, Evelyn's parents were supportive but they were not knowledgeable about the college application process. As a result, Evelyn's older sister talked to her about going to college and also encouraged her to attend the same college she was attending in Washington, DC. Evelyn's sister had a significant influence on her choice to attend an in-state school, but in a different way than the other students in this study that were influenced by their siblings' college experiences. Evelyn's uncertainty of her abilities in comparison to her sister caused her to not consider schools similar to the one her sister was attending.

Genesis

In high school, Genesis lived with her parents and six siblings in northern Phoenix. Genesis' mother was a stay-at-home mom; her father worked as a security officer. Genesis reported her father's income as $30,000. Genesis' eldest sister, who was

eight years older than Genesis, had an associate degree. Another sister, who was three years older than Genesis, was enrolled in a community college; she began community college when Genesis was a sophomore in high school. When Genesis was a senior in high school her sister who was a year older than her enrolled in a Phoenix community college. This sister planned to transfer to ASU once she earned her associate degree.

Genesis attended two high schools, one during her freshman, sophomore and senior years and another one her junior year. Genesis explained that she left the first high school for a variety of reasons which included conflicts with some peers, her sister's attendance at the second high school, and proximity of the second high school to her home. She transferred back to the first high school because she wanted to graduate with her friends, many of whom she had gone to school with since elementary school.

The high school she attended during her freshman, sophomore and senior years enrolled approximately 2,500 students, 73% of them Latina/o (GreatSchools Inc., n.d.) The high school she attended her junior year was slightly larger, with 2,850 students, and a higher proportion (80%), of Latina/o student (GreatSchools Inc., n.d.). Genesis did not report being active in any high school or community activities.

As an Honors student throughout high school, she had always planned to enroll in a four-year university immediately after high school. She received strong encouragement from her parents, especially her father, to attend college, but she reported talking more to her friends than to her parents about her college plans. Genesis thought about her college plans often. Her reason for going to college was to get a well-paying job that she liked and wanted to do. She planned to major in business.

Unlike most of the students in the study, Genesis was enrolled in a pre-college outreach program. According to its website, the Achieving a College Education Program (ACE) "targets students who may not consider going to college and attaining a bachelor's degree as an achievable goal. ACE is specifically designed to help students make a smooth transition from high school to . . . college" (Phoenix College, n.d.). Through the ACE program, Genesis enrolled in community college courses while a junior and senior in high school. Although Genesis was not the only student in this study to earn college credits through a community college while still in high school, the format of the ACE program was unique in that it allowed Genesis to experience taking classes on a college campus. As a result of this experience, Genesis gained a sense of what college was going to be like and reasoned that if she could "do" a community college by earning mostly As in her courses, then she could be successful at a university.

Most of Genesis' information about college came from ACE. Through ACE, she was able to explore career and college options and learn about scholarships. She also received specific information about the steps required for admission to the three state universities. Genesis noted that, "[ACE] definitely gave me a lot of information, a lot of resources. They helped me be comfortable and gave me more knowledge on how university was going to be like." In addition to the information she received from ACE, her counselor told her about the high school courses she needed to take to get into college and gave her information about college entrance exams.

When asked where most of her friends went after high school, Genesis shared that all of her friends attended community college. Despite this predisposition to attend this type of institution, she encouraged her friends to attend a university, telling them "there's

nothing to lose, just try to go" but her friends were too concerned about the cost of attending a university to apply. The cost of attendance, along with financial aid, was also an important factor in Genesis' selection of a college. One of her sisters had shared with her that college was very expensive and Genesis knew that her parents would not be able to financially contribute to her college education. Genesis was also interested in staying close to home and going to a university with a good business school that offered the major she wanted, Entrepreneurship Management.

Genesis did not consider a wide range of institutions. She expressed interest in attending ASU, UA, and an out-of-state Christian business school. She also considered searching for colleges in California, where a sister was attending community college. She eliminated out-of-state schools from consideration because she knew that her mother would miss her like she missed her two sisters who lived in California. Moreover, she wanted to be able to go home and help her mother if she ever needed anything, like help with her younger siblings. For similar reasons, she eliminated UA when she was admitted to ASU.

A good financial aid offer also affected Genesis' choice to attend ASU. Genesis thought she would be eligible for financial aid because she had a large family and her father was the sole breadwinner for the family. Furthermore, her older sister's history of receiving financial aid convinced Genesis that she too would be eligible to receive some financial aid. Despite these factors, she was still worried about how she would be able to fully afford ASU. Genesis received a sufficient financial aid package to attend ASU that included a subsidized student loan. Although she was able to afford ASU with a student

loan as part of her financial aid, she noted that she was hesitant to take out any more loans to help pay future college costs.

Throughout her high school years, Genesis showed great confidence in her ability to achieve her goal of a college education. Undoubtedly, the ACE program helped her to successfully prepare for college enrollment. In addition, she was driven by her father's high educational expectations for her and both parents' encouragement to continue her education beyond high school.

Gloria

Gloria grew up with her parents and five sisters in Phoenix. Gloria's mother had attended grade school. Gloria did not know the highest level of education that her father had completed in Mexico, where he grew up. Her father was a restaurant owner and her mother worked at the restaurant as a waitress. She had an older sister who was attending a community college and another sister who had completed an associate degree. The high school she attended had 2,100 students with a 9% Latina/o student body (GreatSchools Inc., n.d.).

In eighth grade, Gloria began thinking about college; but it was not until she was a sophomore in high school that she decided that she "was going to go to college for sure." Her occupational interests were in the film industry. Gloria's most important reason for going to college was to have "a good back up." She explained that to have a career in film, she "definitely" didn't need to go to college but in the current economy a college degree might give her an edge over a job applicant without a college degree. Gloria had been very active in high school track. At first, Gloria anticipated receiving an athletic scholarship to pay for college; however, she later decided that a film major would

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be too time-consuming for her to run track. Despite her decision not to run track in college, Gloria talked mostly to her track coach about her college plans.

Gloria stated that her parents never told her that they expected her to attend college, but she assumed that because she expected herself to go and because she had a sister enrolled in college, her parents must have expected her to go to college also. Despite her parents' lack of explicit encouragement to go to college, Gloria said that her parents were supportive of her plans. For example, they were able and willing to pay any costs not covered by financial aid.

Gloria's parents wanted her to go to school close to home, but she had hoped she would attend college out-of-state "for the experience." Gloria researched out-of-state schools when she was planning to attend college on an athletic scholarship. However, when she decided she was not going to run track in college, she concluded that without an athletic scholarship, she could not afford an out-of-state school. The availability of a film major was her most important criteria for choosing a school, with cost of attendance another consideration.

Gloria began to actively gather information about colleges and universities toward the end of her junior year. Gloria did not receive much college information from her high school counselor or her older siblings. She explained, "I remember going to the counselor but I'm pretty sure it was just when I was applying." Consequently, she gathered information from the Internet, her track coach and a high school friend.   In addition to these sources, her high scores on the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT) resulted in her being selected as a National Hispanic Scholar. The College Board sent her name, along with other outstanding Hispanic/Latino

students who scored well on the PSAT, to several colleges and universities interested in recruiting National Hispanic Scholars (The College Board, 2011b). Thus, several colleges subsequently contacted Gloria in an effort to recruit her to their respective college.

Because Gloria was interested in a school with a film major, she considered ASU and UA. She researched both schools' film majors using the Internet and visited ASU for a campus tour. When she visited ASU she talked to a student who told Gloria that she loved ASU. Gloria became extremely interested in ASU after hearing that comment because she felt she could rely on a student's opinion about ASU. She did not go to UA for a formal campus tour because she had previously attended an athletic event at UA and was able to see the campus at that time. In the end, she decided to attend ASU because it had a better film program than UA.

Most of Gloria's friends went to a community college after high school. One friend who had been especially helpful when Gloria was preparing for college also decided to attend ASU. Gloria credited her friend with being one of her three sources of information about applying to college. Gloria's friend told her about the colleges she visited, reminded Gloria about items she needed to submit to ASU and informed her about an SAT preparation course. The influence of Gloria's friend as a source of information was not surprising because her friend had parents with college experience, whereas Gloria did not. In addition to conversations that she had about college with her friend, Gloria also engaged in what she described as "casual college talk" with her friend's parents. While they did not offer her advice, they would ask her questions such as "Where are you going?" and "What are you studying?"

Gloria's college planning was unlike that of many students in this study who were academically talented. These students typically were certain about their college plans when they entered high school. Often, their parents and older siblings explicitly stated their expectations that they attend college. Generally, Gloria's parents and sisters were not a major factor in her college plans.

Kulele

In high school, Kulele lived with her parents and three brothers in Phoenix. Kulele's mother worked as a stocker at an auto parts store; her father was a parts inspector at an auto parts manufacturing facility. Her mother had a grade school education and her father had no formal schooling. Since Kulele was an Obama Scholar, her parents' combined family income had to be $60,000 or less (ASU, n. d.-b). Kulele's brother, who was two years older than her, was a senior at ASU.

Kulele's high school enrolled approximately 1,600 students, almost 90% of whom were Latina/o (GreatSchools Inc., n.d.). In high school, Kulele was not very active in her high school or community. Her brother suggested that she participate in community service and join clubs in preparation for applying to college. Kulele joined two clubs and did some community service through these clubs. Kulele earned Bs in her Honors courses. At the same time, there were times in high school that she became frustrated and considered not continuing with her education after high school. Yet, for the most part she planned to enroll in a four-year university immediately after high school.

Kulele received strong encouragement from her parents, especially her mother, to continue her education after high school. Even so, she talked more to her high school counselor and her brother than to her parents about her college plans. About her plans

after high school, Kulele explained, "Not that I didn't care about it, but it wasn't a big weight that I thought about all through high school." Her reasons for going to college were to make her mother proud and to continue learning, because she always enjoyed learning. She also wanted to get a well-paying job with job security. She researched the salaries and employment rates of several careers during high school and thought briefly about a career in nursing. Eventually, she chose to major in Business Management and considered adding Film as a minor.

In comparison to her brother, who had been an excellent student in high school, Kulele did not think she was a good student despite being in the top 10% of her class. Moreover, she made statements about her academic shortcomings often; she seemed convinced that she was not a good student because she was lazy. Her multiple examples of laziness and her lack of success as a student, however, never evolved into concern that she would not get admitted into any of the colleges to which she applied.

Most of Kulele's information about colleges came from high school counselors and her brother. After having gone through the college choice process himself, her brother talked to Kulele about college in general and her college options specifically. He also talked to her about his experience at ASU. In addition, she consulted him for information about other colleges. Kulele also participated in college search and application processes directed by high school counselors. Because Kulele was in the top 10% of her class, she was able to take part in college workshops organized by high school counselors. In these workshops, which took place during school hours, she learned about fee waivers, wrote personal statements, and applied to schools and for scholarships. Kulele also worked as a student assistant in the counseling office which

gave her easy access to her counselor and a variety of college brochures. This access provided ample opportunities to ask questions about different colleges and universities and the application process.

Kulele considered attending several colleges, including Arizona's three public universities, a school in Chicago, UCLA and Stanford. She considered the school in Chicago and UCLA because she has family in Chicago and Los Angeles. She considered Stanford after her brother told her about a financial aid program that Stanford had for low-income students. Kulele was not specific about what she was looking for in a university, but she knew she did not want to attend a community college. She thought that if she chose to attend a community college, especially the one that many of her classmates planned to attend, she was "still going to see the same people there. It will be a second high school." Instead, she applied and was accepted to ASU and NAU.

Kulele wanted to leave home when she went to college, but her mother strongly discouraged this plan. Kulele's mother wanted her to live at home and to attend ASU because her brother went there. Her mother implied that if she went to NAU, a two and a half hour drive from Phoenix, she would not assist Kulele with personal and miscellaneous college expenses, such as clothing or a laptop.

When Kulele decided to attend ASU, she informed her mother that she was going to live in a university residence hall. Despite ASU's proximity to Kulele's home, she said her mother felt as though Kulele was abandoning her. Location may not have been as important to Kulele as it was to her mother, but Kulele was satisfied with her choice of ASU in part because of its location. Kulele stated, "It's far enough that you're in your own little place. . . . but you can go home anytime you want."

The availability of financial aid was Kulele's most important consideration in the selection of a college. Like her brother, Kulele expected to fund her college education primarily with scholarships. Kulele recalled, "It was between NAU and ASU. . . . it's going to come up to who gives me the [most] scholarship money." In addition to being awarded funding through the Obama Scholars Program, she also received an institutional merit-based scholarship. In contrast, NAU's financial aid award included several loans.

In addition to her brother's influence, Kulele's friends also influenced her college choice process. For example, on the days when Kulele became frustrated and considered not continuing her education, one of her friends would encourage her, saying, "No, we're doing this [going to college] and being successful." Also, while she started an application to UA, she decided against completing the application, in part because a friend told her the school and its location were ugly. Finally, Kulele had considered attending NAU because her best friend wanted them to attend NAU together.

Throughout most of her high school years, Kulele expressed some uncertainty about her goals. She vacillated between going to college and not going to college and between various career and major options. One of the most important influences in Kulele's college plans and aspirations was her brother. In important matters like learning about college and applying to colleges, Kulele frequently consulted her brother.

Mariela

Mariela was the middle child of a family living in western Phoenix. Neither of her parents attended high school. Her father had recently started an interstate truck driving company. Her older sister was a senior at ASU and planned to attend chiropractic school upon graduation. Her younger sister was in junior high school. The high school

Mariela attended had approximately 2,200 students with a 73% Latina/o student body (GreatSchools Inc., n.d.). She was enrolled in a college preparatory track in her high school and earned As and Bs in all of her classes. Mariela took several AP classes and received high enough scores to receive college credit for AP Government, AP Statistics and AP Calculus.

Like several students in this study, Mariela was highly focused on going to college. She recalled that an eighth grade teacher who talked about colleges and universities in the classroom got her started thinking about college. The summer after her freshman year, Mariela learned that her older sister would be participating in an ASU summer program for incoming freshmen. Mariela promptly decided that she, too, would attend an ASU summer program and found a program for women interested in careers in engineering. As a result of participating in the program she decided that she "definitely" wanted to major in engineering, attend college, and specifically, attend ASU. Mariela's parents were very supportive of her plans to attend a university after graduating from high school. She reported talking the most to her counselor and friends about her college plans.

For Mariela, the most important reasons for going to college was to get a good job and the most important criteria for selecting a college were the strength of its engineering program and location. While she had decided during the program for women interested in careers in engineering that she wanted to attend ASU, she later decided that she wanted to attend school out-of-state. She may have decided to attend college out-of-state because her closest friends planned to attend college out-of-state.

Mariela learned about specific colleges from her participation in a college preparatory school within her high school. Speaking about her junior year she shared, "I remember one of my English assignments was to look up colleges. . . . we had to have a list of all the universities we looked at and a little summary about them, and why we were interested in them." She also researched schools on her own and reviewed the materials that she received in the mail from colleges and universities. Additionally, she credited her high school counselor with providing a great deal of information about college.

Mariela considered such selective institutions as Cornell University, Massachusetts Institute of Technology (MIT), Notre Dame University and Purdue University. Mariela's father provided high levels of support and encouragement for attendance at any school she chose, but Mariela's mother did not want her to attend college out-of-state. Her father told her, "You go wherever you want" but her mother said, "You're not going out-of-state. You're going to ASU like your sister." Mariela was frustrated by the contradictory messages she received from her parents.

In high school, Mariela visited ASU, NAU, and UA. She decided to apply to 12 schools, including ASU, NAU, the California Institute of Technology (Caltech), Colorado School of Mines (Mines), Cornell University, Drexel University, Fordham University, Massachusetts Institute of Technology (MIT), the University of Notre Dame, the University of the Pacific, and Purdue University. She applied to these schools either because she was interested in their engineering programs or because the school sent her a free application. If accepted, the schools she "would definitely go to," in order of preference, were MIT, Cornell, Notre Dame, Purdue, Mines, Pacific, NAU and ASU.

She was accepted into seven of the 12 schools to which she submitted an application - ASU, NAU, Mines, Drexel, Fordham, Pacific, and Purdue.

Mariela narrowed her choice to Pacific and Purdue. She liked that Pacific was located in California, where she lived until she was six years old. She was also interested in Purdue, but Mariela did not want to accept the $25,000 Federal Parent PLUS Loan that Purdue suggested her parents take out for her first year of college. Pacific, on the other hand, made her a much larger financial aid offer that did not include a PLUS loan. Mariela decided to attend Pacific.

When Mariela made her decision, her father, who had had been supportive of her throughout her decision-making process and who had set no limits on her college options, told her that he would not take out of his savings the $700 she needed to pay Pacific's enrollment deposit. Mariela's father had lost his job a few weeks before the enrollment deposit was due and he was concerned that he might need the money later for living expenses. Not surprisingly, Mariela was devastated. She had no choice but to enroll at ASU, the school she had decided she would only go to if "all else failed." She was somewhat comforted by the fact that at least she would be attending Barrett, the Honors College at ASU, a selective, residential college for academically outstanding undergraduates (ASU, n.d.-a). Mariela was not concerned about the cost of attendance when she applied to colleges. This lack of concern was due in part to her high school teachers telling her about several scholarships. In addition, her father had offered to help her financially. However, it did not appear that she had accurately assessed how much her father would be willing to contribute to her college costs.

Mariela's participation in the college preparatory school within her high school made her much more well-informed about her college options than most of the students in this study. Among the participants in the study, Mariela applied to the most colleges, twelve. Even so, based on financial constraints and proximity to home, ASU was deemed to be the only possible enrollment option.

Michelle

Michelle was the second youngest of six siblings. Since her parents divorced when Michelle was young, she lived with her mother, but had constant contact with her father. Her mother had less than a high school education and her father was a high school graduate. Michelle's mother was a stay-at-home mom; her father was a salesman at a used car dealership. Because Michelle was a Pell Grant recipient, it is likely that her parents' annual income was less than $40,000 (Supiano & Fuller, 2011). Michelle did not attend her local high school but instead attended a public high school in an affluent city located east of Phoenix. Her high school enrolled 2,000 students, of whom 3% were Latina/o (GreatSchools Inc., n.d.). Although her high school offered both AP and Honors classes, Michelle did not take these courses and she was not a strong student. She explained, "I wish I had taken better classes in high school so my grades would have been better."

Michelle's parents expected her to attend college after completing high school. Like several students in this study, Michelle was focused on going to college from an early age because she felt that she *had* to go to college; her parents did not give her a choice in the matter. All of Michelle's older siblings attended college. Her three oldest siblings attended community college but did not complete a degree. One of her sisters,

two years older than Michelle, was a junior at ASU. Michelle planned to attend college immediately after high school like her parents wanted. Nevertheless, she reported talking more to her friends and her sister about her plans than to her parents.

Michelle took an SAT prep course offered at her high school and engaged in other tasks to prepare her for applying to college. For example, she compared school brochures for the three state schools, researched the school she was interested in attending, and explored different options for paying for college. She would also go to see her counselor whenever she had any questions. Michelle credits her high school with providing her with the most college information and her high school's college-going culture as having a major influence on her college plans. In addition to the strong influence of the school context, she also relied on her sister for information during the college choice process.

For Michelle, the most important reason for going to college was to not be a failure ("It was either go to college or be a failure.") and the most important criteria for selecting a college were its cost of attendance and distance from home. In her junior year, Michelle began to narrow her focus by aspiring to enroll at ASU and pursue a degree in business. Despite attending a high school where "everyone else . . . applied to maybe 10 colleges," Michelle applied to one college, ASU, because it was close to home. Michelle shared that if she went to ASU she would be able to see her parents on the weekends.

Michelle thought a lot about how she would pay for college. She was hopeful that she would receive a financial aid award similar to that of her sister's and anticipated getting a job if her financial aid award was not enough to cover her cost of attendance. Michelle's financial aid award from ASU included federal and institutional grants,

including funding through the Obama Scholars Program, but this funding was not enough to cover her cost of attendance. Michelle decided to take out a $3,000 student loan. She decided that instead of getting a job, she would make school her job and focus on keeping her merit-based aid. Since her parents were not able to help her pay for college, she could not afford to lose any of her aid.

Michelle had never considered not going to college. The only question for her was which school she would attend. Unlike most of the students in the study, Michelle attended a high SES high school where college counseling is proactive and students receive a lot of information about college; yet she limited her college possibilities to just one school, ASU. Her high school provided her with the opportunity to engage in an extensive college search and choice process, but Michelle made different choices than her high school peers.

Nicole

Nicole grew up living with her parents and two older sisters in a small town outside Phoenix. Her father was a programmer and her mother was the office manager at an elementary school. Nicole's mother and father had both graduated from high school. Nicole's sisters graduated from two different universities. Whereas her oldest sister graduated with a bachelor's degree from a California school, her other sister, who was closest to Nicole in terms of age, held a bachelor's degree from ASU. Nicole was an Honors student in high school and was active in yearbook activities. The high school she attended had 1,800 students with a 27% Latina/o student population (GreatSchools Inc., n.d.).

Throughout high school, Nicole thought a lot about her plans after high school; she knew she would attend a four-year university. Her parents had similar aspirations for her. Both Nicole and her parents believed that the most important reason for going to college was that she would not have to struggle financially the way her parents did when she was younger.

Nicole's occupational interests were related to her intended majors, psychology and sociology, and her interest in working with children. She was interested in either working as a high school guidance counselor or a court-appointed counselor to children. Over the course of high school and her first year of college, Nicole's plan evolved from a plan to earn a bachelor's degree to earning a master's degree. In April of her first year in college, she planned to complete her bachelor's degree in three years and enroll in ASU's six-month master's degree in counseling program.

Nicole described her parents and the sister who was closest to Nicole in terms of age as supportive of her educational aspirations. They strongly encouraged her to attend college after high school. In fact, her "whole life" Nicole's parents had been telling her that she was expected to attend college. Her mother and her sister were very involved in Nicole's college plans. Nicole's mother's previous experience with her sister helped her to become more knowledgeable about the college choice process and she was therefore able to help Nicole look for scholarships and complete the FAFSA. Her sister also gave Nicole information about the FAFSA and introduced her to Fastweb, a website where students can search for information about scholarships, colleges, and financial aid (Fastweb, 2012). However, Nicole reported that her sister mostly provided valuable emotional support during her college planning process. Nicole found the process

overwhelming but was able to make decisions despite feeling overwhelmed because she could talk about what she was experiencing with her sister.

Though most of Nicole's friends planned to attend college after high school, not all planned to attend a four-year university. Some aspired to attend four-year universities, even considering Ivy League schools, still others considered community college. Nicole estimated that half of her high school friends attended ASU and the other half attended a community college. While Nicole understood her friends' reasons for choosing a community college, she did not see community college as an option for herself because she had seen some of her cousins attend and subsequently drop out of community college. For this reason, her sisters also discouraged her from attending a community college.

Nicole considered attending ASU and NAU and actively gathered information about college from her high school guidance counselor, English teacher, sister and mother. Along with gathering information, she visited NAU before she decided which university to attend. Although Nicole identified her counselor as one of the people who provided her with the most information about college, she also stated that she "didn't have the best guidance counselor." She noted that she was appreciative of the information her counselor provided, but she explained, "If you didn't go to see her, she wouldn't even try. I was there quite often because I wanted to get ahead but it wasn't really her putting that much of an effort into me."

Nicole applied to and was admitted to both ASU and NAU. According to Nicole, she chose where to attend college based on ASU's good psychology program, adequate financial aid, and location. Both Nicole's parents and her boyfriend hoped she would

attend a school close to home. When Nicole was considering NAU, a three hour drive

from her home, her father told her "I'm going to miss you. It's going to be too far."

Nevertheless, he prepared for the possibility of her attending NAU by looking into

securing a AAA membership for her in case she ever had trouble with her car when she

drove back and forth from NAU. Her mother was also supportive of the possibility of

Nicole attending NAU, telling her, "It's your experience." Her boyfriend, who chose to

attend ASU, did not mind her attending NAU, but he did not want her to attend school

out-of-state. Nicole acknowledged that he influenced her application and enrollment

decisions.

Nicole anticipated needing financial aid to pay for college. Nicole's largest

financial aid award was ASU's Dean's Award. This award, part of an institutional

scholarship and financial assistance program, is "offered to outstanding freshmen" with

award amounts ranging from $2,750 - $9,000 (ASU, n.d.-c). Though Nicole did not

specify her award amount, she did indicate that ASU gave her a better scholarship than

NAU; this scholarship had been one of the reasons she chose ASU over NAU.

Nicole was an interesting study participant because the role of her mother was not

characteristic of most students in this study. Most of the students in this study had

parents who expected them to go to college and encouraged college aspirations but were

not able to provide concrete information about college. Nicole's mother, on the other

hand, was able to provide Nicole with information about college and assist her with

specific college planning tasks.

Patrick

Patrick attended the same high school as Erika. His parents worked in a grocery store and were both high school graduates. Since Patrick was an Obama Scholar, his family income was likely $60,000 or less (ASU, 2012). Patrick was the youngest of six siblings. Despite having six siblings he only lived in the same house with two of them, a brother who was four years older and a sister seven years older. His brother earned a bachelor's degree from ASU and his sister attended college but did not complete a degree.

Patrick's parents were not knowledgeable about college and in general did not express any opinions about Patrick's future and the colleges he should consider. Patrick reported that his parents only somewhat encouraged him to attend college after high school, telling him that they hoped he went to college but not "pushing it on" him because they knew they could not afford to help him pay for college. Despite this lack of strong parental encouragement, Patrick reported that from an early age he planned to go to college because of his brother. His brother got good grades, was an athlete, and planned to go to college.

From an early age, Patrick had exposure to colleges and universities. He attended a choir competition in high school held at UA's campus and spent a couple of summers at NAU attending music camp. He visited Biola University in California with his church. He also visited ASU's campus several times throughout his life for parties, school events, plays, and football games. Although his brother was a student at ASU, Patrick did not visit his brother at ASU or report receiving any information from his brother about his college experience.

During high school, Patrick changed both his educational and occupational aspirations several times. While he mentioned that he planned on earning a bachelor's degree, he also talked about earning a master's degree and a doctorate as well. His career interests shifted among several possibilities that included a foreign language career, teaching in the U.S. or abroad, employment in a U.S. embassy, interior design, therapist, and religious studies.

Despite the fact that Patrick was unsure about his educational and occupational plans, he sought out information to help him make decisions about a college and a major. For example, he signed up to receive information from Fastweb. He also learned about specific colleges by attending the presentations made by various college admissions representatives during their visits to his high school. When he was thinking of a foreign language career he contacted a family friend to learn about study abroad programs. Information from the family friend also helped him to determine that his career options would be limited if he did not pursue an advanced degree.

Patrick's mother did not want him to go to school out-of-state, but Patrick stated a number of times "my main goal was out-of-state." Cost of attendance did not seem to play a role in the schools Patrick considered. Patrick was primarily interested in attending FIDM/Fashion Institute of Design & Merchandising (a private for-profit college in Los Angeles) and majoring in Interior Design. He also had an interest in attending James Madison University (a public university in Virginia) and majoring in French. The average costs of attendance at those schools were $23,000 and $37,000 respectively. Both schools' costs were considerably more than the cost of attendance at ASU (ED, IES, & NCES, n.d.).

Patrick was, to some extent, knowledgeable about financial aid. Patrick thought he might qualify for institutional scholarships. He had also considered loans, but his mother was opposed to applying for them. Patrick described his mother's view on loans as such:

> I thought for sure I was going to go and I was just going to take out enough loans but then I found out…if your parents don't have good credit you can't get very many good loans. My mom refused to apply for anything because she knew she was going to get denied so it was going to hurt her credit so she was like, "I'm not going to apply for anything."

For Patrick, financial aid was an important factor. He needed sufficient financial aid to cover all of his direct costs of college because he expected to pay for additional expenses himself. Because students, and not parents, apply for Stafford Loans via the FAFSA (ED, 2010b), Patrick may have been referring to his mother's hesitation to apply for a Direct PLUS Loan for Parents. A credit check is done when a parent applies for a Direct Plus Loan and in order to be eligible, the parent must not have an adverse credit history (ED, 2010a).

Although he was accepted for admission, scholarship possibilities at FIDM and James Madison did not work out for Patrick. Consequently, he applied to and was admitted to ASU and UA. Thus, the cost of attendance played a direct role in his choice of college. Patrick enrolled at ASU because his cost of attendance at ASU was covered by the Obama Scholar Program. Patrick was disappointed that he had to attend his "safety school" and looked forward to attending graduate school out-of-state.

On the whole, Patrick's plans were not very well-developed by the time he graduated from high school. By the time they entered college, most of the students in this

study were more certain of their plans than Patrick. In contrast, Patrick continued to be unsure about a major and a career his freshman year of college.

Roger

Roger was the youngest child of five orphaned siblings living in a city 20 miles west of Phoenix. Roger's parents died in a car accident when Roger was five years old. His eldest sister, 18 at the time, was given custody of all of her younger siblings. Roger said about his eldest sister, "She's basically been my mom." Roger's sister attended community college a few years after graduating from high school but did not complete a degree. She worked as a manager at a provider of internet, phone, and TV services. Roger's brother, who Roger identified as the father figure of the family, worked in real estate. He joined the military immediately after high school and later attended community college but also did not complete a degree. Roger had two other sisters. One delayed her college enrollment after high school but subsequently attended community college and later earned a bachelor's degree in a business-related major from ASU and another sister attended community college but did not earn any college credit. Since Roger was eligible for the Obama Scholars Program, his combined family income was likely $60,000 or less (ASU, 2012).

The high school Roger attended had 1,800 students and a 53% Latina/o student population (GreatSchools Inc., n.d.). Roger took several Honors and AP courses and was in the top 10% of his class. He also took dual enrollment courses at his high school through a partnership between his high school and a local community college. He did not report being involved in any activities outside of the classroom.

Several students in this study, like Roger, received messages from a young age about college; these students could not recall a time in their lives when they had not been told they were going to go to college. Roger reported that he had been told his whole life by his siblings that he was going to go to college. Roger stated that he "didn't have a choice not to go." Nevertheless, it was not until eighth grade that Roger made a deliberate decision to go to college. His transition from eighth grade to high school prompted him to start planning for college. Roger's siblings strongly encouraged him to attend a four-year college immediately after high school even though they had chosen to take time off after high school and attend a community college. Roger reported that his siblings stressed, "Don't do that. We made that mistake."

For Roger, the most important reason for going to college was to be able to have a career rather than "just have a job." Beyond this aspiration, however, his careers goals were not very focused. He planned to attend a four-year university and earn a degree in computer science and perhaps eventually pursue a master's degree.

Roger participated in activities during high school to help him get ready for college. For example, he took the SAT to prepare for college. He acknowledged that the SAT was something he wished he would "have done a lot better in and prepared for because" he "just went into it blindly." Roger also used the College Board's college planning resources. At The College Board website, students can "find colleges, learn about financial aid and use expert college planning tools" (The College Board, 2011a). He also talked to his siblings (especially his brother) and AP teachers about his plans. However, he credited his high school guidance counselor with providing the most

information about college. He relied on his counselor because none of his siblings had attended a four-year college immediately after high school.

Roger considered such institutions as ASU, NAU, UA, Grand Canyon University (GCU), and UCLA. Of the schools he considered, Roger visited GCU and ASU. Out of all his siblings, Roger's brother offered the most feedback about the schools Roger was considering. For example, his brother encouraged Roger to apply to UCLA because that was his brother's "dream college" and also because his brother wanted Roger to attend school out-of-state. He told Roger that there was "more to the world than just Arizona" and encouraged Roger to "get out there." It is possible that Roger's brother wanted Roger to have the college experience that he was not able to have due to their parents' death.

The most important criteria for selecting a college for Roger were its location and cost of attendance. Roger's interest in going to school close to his family and friends proved to be a factor in his choice of college. Roger applied to ASU, NAU, UA, and UCLA. Of those schools, he was admitted to all but UCLA. Roger narrowed his choices to ASU and UA. He was never very interested in NAU and only applied because NAU sent him correspondence telling him he had been pre-approved for admission. When he was trying to decide between ASU and UA his girlfriend announced that she was going to ASU. Roger thought, "Well, I guess me, too." Roger was concerned about losing all his friends and his girlfriend if he did not attend ASU. Although Roger stated that the most important factor for him in choosing a college would be who offered him the most financial aid, it is clear based on his comments that Roger wanted to attend a college

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where he could be close to his friends. The proximity of his family was also an important factor in his decision.

Roger's brother offered feedback throughout this process. Roger explained that his brother discouraged him from attending UA because of its desert location and he also discouraged him from attending NAU because of the winter weather. When Roger was trying to decide between ASU and UA his brother advised him to attend ASU. His sister who graduated from ASU, and was the only sibling with a college degree and experience at a four-year university, did not advise him either way on whether he should attend ASU.

Roger was pleasantly surprised that he received financial aid from the Obama Scholars Program. He had expected to pay for college with the money he received from his father's life insurance policy. However, after the Obama Scholars funding, he was left with a $1,000 balance that he was able to pay from money he had in savings.

In many ways, Roger was similar to the other students in this study. He had the goal of attending a four-year university and actively pursued this goal. Like other students in this study, he knew he wanted to go to college but he did not have a clear set of educational goals nor did he have a clear list of colleges to consider. His list of schools ranged from a private, for-profit (GCU) to public universities (ASU, NAU, UA, and UCLA). He finally selected ASU because his girlfriend announced that she had chosen to attend ASU. Thus, for Roger, the final selection of a college was influenced by a peer.

Victor

Victor attended a high school in a city 160 miles northwest of Phoenix, where he lived with his parents, two older sisters and a younger brother. Neither his mother, who worked at a resort as a hotel maid, nor his father, who worked as a groundskeeper and in construction, attended high school. Both of Victor's older sisters had college experience. His 28-year-old sister attended community college immediately after high school and later earned a bachelor's degree at NAU. His 26-year-old also did not go to college immediately after graduating from high school, and was enrolled in a community college. Similar to others students who were also Obama Scholars, Victor's combined family income was likely $60,000 or less (ASU, 2012).

Victor attended a relatively small high school. The high school had 530 students and 34% were Latina/o (GreatSchools Inc., n.d.). He took several Honors courses but was unable to take AP courses because his high school did not offer them. In addition to doing well academically, Victor was very involved in high school activities. Victor's parents and his 28-year-old sister encouraged him to attend college after high school. Victor reported that he did not talk to his parents much about his future, but he did have several conversations about his future with personnel from the Upward Bound program. Upward Bound is a federally funded program for high school students that promotes college attendance (ED, 2012). He became involved with this program beginning his sophomore year of high school.

Victor spent a great deal of time exploring his college options. In addition to his involvement with Upward Bound, he was also involved with Talent Search, a federally funded program that also encourages college attendance for individuals from

disadvantaged backgrounds (ED, Office of Postsecondary Education [OPE], 2011b).

When he started high school, Victor initially planned to go the same college path as his sister. He planned to go to the same community college that his 28-year-old sister had attended and then transfer to the same university she attended. He curtailed his plans with the help of the Upward Bound program where he learned about other options. With Upward Bound's guidance, he conducted internet searches, visited campuses, and talked to college personnel. Also, Upward Bound allowed him to explore career options; through the assistance of the director, he was able to attend health care camp and volunteer at a rehab center. As a result, he became interested in a career in health care.

Victor applied to ASU, NAU, and as a backup he also applied to the community college his 28-year-old sister had attended. Moreover, he could have continued to attend the community college where he took a dual enrollment course his senior year of high school. The cost of a college education was very important to Victor – and to his 28-year-old sister. Victor had several conversations with his sister about college costs. He described his sister as "realistic. She brought up the numbers." His sister made it clear to Victor that their parents could not afford to both contribute to the cost of his college education and to take care of themselves and Victor's younger brother. She first encouraged him to attend a community college immediately after high school. Later, when he expressed an interest in attending a four-year university instead, she encouraged him to apply for scholarships and to attend the school that awarded him the most financial aid. Victor decided to attend ASU, in part because of the generous scholarship funding he received. Thus, he did not have to take out a loan for his first year of college.

Victor shared that his family, including his parents and sister, and the director of his Upward Bound program, were important influences on the decisions he made as he was deciding whether and where to go to college. Victor had many conversations with his sister and director about his college plans. Victor's parents encouraged him to attend college after high school, but he did not talk to his parents much about his plans because his "parents didn't really understand too much of it." He also reported that his high school teachers and counselor were not influential as he made his way through the college choice process.

Victor reported having supportive parents, a supportive sibling, and pre-college program personnel who took interest in his future. In addition, his good grades and educational and career ambitions led him to choose to enroll in a four-year university immediately after high school. Moreover, adequate financial aid helped him to make his college goals a reality.

Victoria

In high school, Victoria lived with her parents and her older sister near downtown Phoenix. She also had an older brother who lived in Phoenix, outside of the family home. Both her mother, who worked primarily with English Language Learners at a K-5 school, and her father, who was a solid waste worker, were high school graduates. Victoria did not provide information about her parents' annual income, but since she was a Pell Grant recipient, it is likely that her parents' combined annual income was less than $40,000 (Supiano & Fuller, 2011). Victoria's sister, who was four years older than Victoria, took a year off after high school and then enrolled in a Phoenix community college. Her brother, who was eight years older than Victoria, attended ASU for a year

and a half and then transferred to a community college because he was failing his classes at ASU. Both of Victoria's siblings are currently enrolled at the same community college.

Victoria's high school enrolled approximately 2,200 students; over 90% of them were Latina/o (GreatSchools Inc., n.d.). In high school, Victoria was not active in her high school or community. She was an Honors student who graduated in the top 9% of her class and all through high school she planned to attend college immediately after high school. She received strong encouragement from her parents and siblings, and she reported talking to them more than anyone else about her college plans.

Victoria knew she wanted to attend a university. While her father agreed that she should attend a university, her mother thought that Victoria should attend a community college because it would cost less and because she thought that Victoria was not ready for a university. Victoria was reluctant to attend a community college because she had seen both of her siblings attend a community college for more than two years and not complete a degree. As she considered which university to attend, the availability of a graphic design major was the most important factor for Victoria but the total cost of attendance was also an important consideration. According to her mother, the total cost was *the* most important factor.

Most of Victoria's information about colleges came from a college access program whose goal is to prepare Latina/o students for college admission and graduation. Victoria was involved with this program her junior and senior years of high school. This program was especially beneficial for Victoria because her senior year high school counseling was inadequate. She had two counselors her senior year of high school. Her

first counselor did not talk to her about college at all; her second counselor kept suggesting that Victoria attend a community college even after Victoria expressed reluctance.

Although Victoria learned a great deal about college from the college access program, she also collected information about college from other sources. In addition to learning about college from her teachers, she sought out the advice of her mother, siblings and an uncle who graduated from a highly-ranked liberal arts college in Massachusetts. However, her uncertainty about some of her plans was exacerbated by the contradictory information she received from her family. For example, her uncle told her not to take the cost of a college into consideration as she was making a decision about which school to attend, but her mother told her not to listen to her uncle, that Victoria had to worry about money. Victoria also learned about possible colleges from brochures she received in the mail. Victoria looked at college materials when she received them and eliminated from consideration any schools that did not offer a graphic design major.

Victoria considered a variety of schools. She considered ASU and NAU, GCU, Loras College (a small, Catholic liberal arts college in Iowa) and Phoenix College, a community college. She applied to GCU after she learned that one of her close friends planned to attend GCU. Loras College was one of several schools that Victoria visited with the college access program. Victoria thought Loras was "really cool" and considered going there with her best friend but Victoria later thought she might not be comfortable going to school so far away from home. In trying to gauge further the impact of her friends, I asked if most of her friends went to college after graduation. She

answered that two of her friends attended GCU and many were attending Phoenix College.

Victoria applied and was admitted to ASU, GCU, NAU and Phoenix College. She quickly eliminated Phoenix College and GCU from consideration. Although GCU offered her a scholarship, she did not think GCU had a strong graphic design program. She chose ASU over NAU because ASU's financial aid award contained significantly less loans than NAU's award. Victoria's reason for going to college was to train for a career that she liked rather than get "stuck" with a job that she did not like. She majored in graphic design but she considered changing her major because the coursework was more difficult and time-consuming than she expected.

Throughout her high school years, Victoria revealed great certainty about her goals. Her mother and high school counselor were strongly encouraging her to attend a community college, yet she was determined to attend a university. A noteworthy aspect of Victoria's decision-making process was that even though she was an Honors student who graduated in the top 9% of her class, Victoria did not consider herself to be a strong student. Victoria often compared herself to her brother and sister who had been in gifted classes since elementary and middle school. She stated often that learning continued to be very difficult for her. Therefore, it is surprising that she chose to attend a university, a place where she explained she would have to "do my best and focus" rather than the community college, a place that her sister described as easy and not challenging.

The next chapter presents an analysis of the college choice process for the 17 Mexican-American first-generation participants. Instead of considering the 17 profiles (or cases) individually, the next chapter presents a cross-case analysis of the college

choice process using Hossler and Gallagher's (1987) three phase model of college choice while incorporating variables from Perna's (2006) proposed conceptual model of student college choice. The subsequent analysis collectively employs these 17 individual participant profiles (or case studies), as well as questionnaire responses, individual interviews, and public document reviews, to provide a cross-case analysis with the intention of building a general explanation that fits the individual cases (Merriam, 2009). Chapter five focuses primarily on the influence of family, peers, and teachers and counselors, as transmitters of cultural and social capital, during each phase of the participants' college choice process. Chapter five concludes with additional factors that were cited as influences on participants' college choice process.

Chapter 5: Findings and Analysis

A review of the literature of the college choice process of Mexican American students revealed that family, peers, teachers, and counselors have varying degrees of influence on the college choice process (Azmitia et al., 1994; Contreras-Godfrey, 2009; Hamrick & Stage, 2004; López Turley, 2006). The extent to which some of these factors influence college choice is explored in Perna's (2006) proposed conceptual model of college choice. In particular, Perna makes reference to some of these factors in the following key variables: cultural capital, social capital, and school context. Perna proposed that students' access to cultural and social capital along with the school context are important factors in the college choice process.

This study defined influence as a student's perception that someone or something affected decisions during the college choice process and focused primarily on the influence of family, peers, and teachers and counselors, as transmitters of cultural and social capital, during the three phases of Hossler and Gallagher's (1987) three phase model of college choice. For this reason, the study's findings are separated into three main sections: (1) predisposition, (2) search, and (3) choice. Within each section, the influence of family, peers, and school context (teachers and counselors) are presented respectively. Using the cross-case analysis method (Merriam, 2009), this chapter provides a detailed discussion of the college choice process of 17 Mexican American first-generation students who had an older sibling who attended or was attending a college (hereafter referred to as "older sibling" unless otherwise noted). The primary research question and sub-question guiding the study were:

1. How do Mexican American first-generation students who have an older

sibling with college experience describe their college choice process?

     a. What are some of the familial, social, and academic factors that Mexican American students identify as influences on their college choice process?

After the discussion of the influence of family, peers, and teachers and counselors, an additional section is presented to highlight factors that students referenced as influencing their college choice process. This additional section presents the other factors of influence that were cited beyond that of family, peers, teachers, or counselors. The chapter ends with a summary of the findings.

Predisposition, Search, and Choice

Table 2 summarizes the factors that participants cited most frequently as influential during their college choice process. First, during the predisposition phase, when students made the decision to go to college, siblings and parents were most influential. Also, although students did not name high school teachers and counselors as having influenced their decision to go to college, ten participants acknowledged that their high school teachers and counselors expected and encouraged them to go to college. Second, during the search stage, when students were looking for general information about college and about specific institutions, they received information most often from teachers, older siblings, and counselors. Six students also added a school to their list of tentative institutions specifically because their sibling was attending or had attended the school. Third, and institution's distance from home and institutional type (four-year institution vs. community college) were cited more often than familial, social, and academic factors as an influence on where participants applied. Finally, the factors that

were found most often to influence enrollment decisions were an institution's distance from home and cost and financial aid.

Table 2

Summary of Findings

College Choice Phase	Familial		Social	Academic (School Context)		Other
	Parents	Siblings	Peers	Teachers	Counselors	
Predisposition	12	14	6	0 (7)	0 (3)	
Search	4	12 (6)	8	15	11	
Choice: Application	2	6	7	2	2	• Distance from home: 10 • Institutional Type: 10
Choice: Enrollment	2	5	7	1	5	• Distance from home: 12 • Cost and financial aid: 9

This chapter will now discuss the influence of family, peers, and teachers and counselors, in addition to other factors of influence that were cited beyond that of family, peers, teachers, or counselors.

Predisposition

Hossler and Gallagher's (1987) three phase model of college choice depicts the college choice process as taking place in three phases (or stages). The first phase, predisposition, refers to the decision to go to college instead of taking other paths. Drawing on the concepts of cultural and social capital within Perna's (2006) proposed conceptual model of student college choice, this section discusses the influence of family, peers, teachers, and counselors on the predisposition stage.

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Family

The majority (15) of the participants identified a member of their immediate or extended family as having influenced their decision to go to college. Students discussed the different ways in which family members influenced them. From the student's perspective, this influence was based on the family member's implicit or explicit verbal expectations, encouragement and/or college attendance. Specifically, these expectations were distinctly verbalized for nine participants who shared that family members had explicit expectations that he or she would attend college. Similarly, for those who did not say that their family was explicit in their expectation, they said that their family members provided encouragement for them to continue their education beyond high school. Some students also noted that college attendance by a family member also acted as an influence in their college choice process; these family members were role models when students were considering their options beyond high school.

Albeit the influence of family members can come from the immediate family or extended members, parents emerged as the most influential family member on students' decision to go to college. Table 2 show that participants mentioned older siblings more often than parents, but I concluded that parents had more of an influence than siblings for two reasons. First, the language that participants used when they talked about their parents was different than the language they used when talking about their siblings. More enthusiasm, passion, and emotion could be heard in participants' voices when they talked about their parents. Second, parents came up 12 times unprompted in response to the interview question "Who had an influence on your decision to go to college?" (See Appendix C). Siblings, on the other hand, sometimes were mentioned in response to this

question but other times were not mentioned until the follow-up question "How did your [older sibling(s) with college experience] influence your decision to go to college?"

The findings from this study also indicate that parents played key roles in the participants' decision about attending college. For most of the participants, this parental influence took the shape of high expectations to attend college. This finding is consistent with much of the previous work on college choice that suggests that parents play a critical role in a student's decision to go to college (A. F. Cabrera & La Nasa, 2000a; Hossler et al., 1999; P. A. Pérez, 2007). In particular, this research finds that Latina/o parents who are positive influences on the educational aspirations of their children often influence a student's predisposition to go to college by either expecting their children to go to college (Hamrick & Stage, 2004; Hao & Bonstead-Bruns, 1998) or wanting their children to go to college (Azmitia et al., 1994).

This study found that 12 out of 17 participants pointed to their parents as having an important influence on their decision to go to college. When asked about who influenced his decision to attend college, Arnold believed that his mother was influential in his decision. He stated that she "always expected something better for me." Arnold stressed, "She wanted a better, higher education for [me and my sister]." Even though Arnold did not indicate what his mother meant by "something better," throughout his interview he gave examples of what something "better" meant. Arnold indicated that "better" had to do with having a better job or being better off financially. Consequently, the unspoken message his mother may have been conveying to him was that she wanted a better job or a better financial standing for Arnold. She might also have been implicitly saying that she wanted him to have a better job than she ever had.

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Like Arnold, other students discussed this notion of parents wanting better for them. Three students commenting on the influence of their parents also stressed this link between parents wanting their children to go to college and wanting "something better" for them. Erika, who grew up in a single parent household, noted that her mother was the most influential factor in her decision to go to college. She shared, "My mom was always really encouraging 'cause she didn't have the chance to really pursue an education after just a high school education. She was really encouraging from the start." Cindy also indicated that her parents influenced her decision to go to college:

> My parents always encouraged me because they always told me since I was little . . . I think it was third grade. They always told me that since they didn't go to college or didn't even finish elementary school they would like me to make something of myself. My dad really wanted me to finish college.

Albeit Erika and Cindy's parents' lack of personal experience with college, both of these participants acknowledged that their parents encouraged them to go to college. They thought that their parents perceived a college education as being important due to their parents' own limited education. A parent wanting their child to surpass their own educational attainment conveys that a parent wants "better" for that child.

A common thread in the participant's experiences was that their parents conveyed to them a strong expectation and encouragement for college attendance. Seven of the 12 students who identified their parents as having an important influence on their decision to go college were told by their parents explicitly that they *had* to continue their education beyond high school. In other words, these students felt they had no choice but to go to college right after high school. As Cassie stated, "It was never a choice really. It was kind of…'You have to go to get a degree.'" The remaining five students who felt that they had a choice noted that while they had supportive parents that wanted and

encouraged them to continue their education beyond high school, they did not require that they attend college. The final decision of whether to go to college was left to the student. Alex, for example, indicated that his parents were supportive of both him and his brother's decisions to go to college. However, Alex also acknowledged that had he decided not to go to college, this also would have been acceptable to his parents.

> They were just supportive. Always supportive of anything that we wanted to do. If I want to be a wrestler or a boxer, or something like that, that's just how our parents are. They're never going to be- they're never going to tell us we can't do something.

Likewise, Erika noted that although her mother encouraged her to go to college, she may not have been opposed to Erika taking an alternative path. In considering what her family's reaction might have been had she decided not to go to college, Erika speculated that, "they might have [been supportive of me not going to college]. Not easily. I think they would have warmed up to the idea eventually but it honestly would have had to depend on what I had decided to do instead of [college]." She added, "They would have been encouraging with anything as long as I was happy about what I was going to do."

Both Alex and Erika believed that their parents conveyed their desire for them to be happy first while strongly supporting and encouraging college attendance. In the end both students believed that the decision to go to college was left up to them. As with other studies (A. F. Cabrera & La Nasa, 2000a; Hossler et al., 1999; P. A. Pérez, 2007), their experiences indicate that parental support and encouragement has an important impact on the decision to go to college. Moreover, their experiences are also consistent with previous findings that suggest that working-class parents do not "see themselves as responsible for assertively intervening in their children's schooling" (Lareau, 2003, p.

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289) and tend to adopt a cultural logic of child rearing that stresses allowing children to be responsible for their lives outside the home (Lareau, 2003).

A small minority of the participants, five of the 17, indicated that they had parents who did not offer a strong encouragement for college. Patrick, for example, said that his parents were concerned about the cost of college. His parents expressed their hopes that he would attend college, but they also told him that they would not be able to pay for college.

> They were like, "Hope you go to college." But they always knew that they weren't going to be able to pay for it so I guess they never really pushed it on me because they knew they weren't going to be able to afford it if I ever tried going.

While Patrick acknowledged that his parents influenced his decision to go to college, he interpreted this influence as a counterproductive or unenthusiastic encouragement for college attendance. He indicated that he felt frustrated with them throughout his college choice process. From Patrick's point of view, because his parents were unable to pay for college, it was his responsibility – and his alone - to make the decision of whether and where to go to college. He stated that he had to be "smart enough to get [college] on my own."

Though Patrick might have viewed his parents' encouragement as lukewarm at best, four participants indicated that their parents did not express any expectations or encouragement for postsecondary education. Gloria explained that her parents never explicitly communicated an expectation to pursue college or some kind of schooling beyond high school. However, she concluded that they must have implicitly expected her to go to college. She noted, "My parents just expected it because I expected it from myself as well and my [older] sister was going. . . . They've always expected it but it was

definitely just more me. I knew I was going to [go]." Gloria's example is not representative of most students in this study, but her observation is not unusual in that there are students who come from families in which it is assumed that they will go to college (Glick & White, 2004; Kaczynski, 2011; Rooney, 2008). Gloria's belief that her parents "always expected" her to go to college points to the important role of parents in providing the cultural capital necessary for college enrollment.

Research has shown that Latina/o parents' motivations for wanting their children to attend college are driven by reasons related to employment and earnings (Castillo, Conoley, Cepeda, Ivy, & Archuleta, 2010; Ceja, 2004; Valencia & Black, 2002). Consistent with previous research findings, eight of the participants indicated that their parents wanted them to go to college to improve their future employment and earning opportunities. For example, several students shared that their parents communicated to them that they could get a better paying job if they attended college. In addition, they also expressed that their parents wanted them to further their education beyond high school because of parents' economic struggles and having to work in manual labor positions. For instance, Evelyn felt that her parents did not want her to experience the financial difficulties that they themselves had experienced. She shared, "Our parents have always been telling us that we shouldn't have to work so hard to make a living, like they have. They've always said that. They've been making a living for us to go to college." In Genesis' case, her father talked to her about the importance of a college education in providing financially for her future family: "He thought [education] was important because with a good education I can obtain a high paying job, which will allow me to provide for my future family and myself."

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Participants also pointed to their parents' educational regrets when discussing their parents' influence on their college choice process. They noted that their parents often encouraged them to attend college so that they could have a better life than their own and because their parents regretted not continuing their own education. Edwin, whose mother dropped out of high school, provided an example of these reasons for encouraging college attendance. In recalling a conversation in which his mother told him about her educational regrets, he recalled her saying:

> Look at – what I've done with my life and all the opportunities I had and how I messed that up by not staying in school. . . . I messed up in bettering myself so I didn't have to work this hard at this age in my life and at this point. . . . I want you to go to school just so you don't have to have as hard a life as I have.

Mariela noted that her father stressed staying in school and continuing on to college because he regretted not continuing his own education. She said that her father shared with her,

> "I could've gone to high school. . . . I could've probably gotten my diploma . . . I regret not doing so. . . . My dad never pushed me to go to college, and I was young, and he never pushed me. He never told me to go to school. He always told me to go to work. . . . I'm not going to tell you guys to go to work. . . . I prefer you guys to go to school than to work."

The examples above are representative of parent-student discussions in which parents made a connection between college and a better life and discussed their regret of not continuing their own education. These parent-student discussions highlight the role of Latina/o parents as transmitters of social capital (Perna, 2006) during the college choice process. Some researchers have suggested that low college enrollment rates for Latina/os may be attributable to possessing less of the types of social capital that are valued in the college enrollment process (Admon, 2006; González et al., 2003; O'Connor et al., 2010). However, Perna's conceptualization of social capital maintains that parental involvement

in their children's education, which includes parent-student discussions about college, increases the probability of enrolling in college. Perna and Titus (2005) suggest that through parent-student discussions about college, parents convey norms and standards in ways that promote college enrollment.

For the students in this study, parent-student conversations about college had a positive effect on college aspirations. Conversations with parents were interpreted as parental encouragement and often translated into motivation to attend college for students. Rendón Linares & Muñoz (2011) suggest that parental encouragement and support for college are validating experiences that promote college attendance. Validation has been found to have a positive impact on the personal development and social adjustment of first-generation and ethnic/racial minority college students. As validating agents (Rendón, 2002), parents played an important role in providing participants with knowledge about the benefits of a college education. The majority of the students recalled discussions in which their parents drew a connection between college and a better life. Students viewed their parents' regret for not continuing their own education as parental encouragement and support. As a result, many of the participants decided to go to college because they did not want to struggle financially as their parents had. Based on this encouragement, many students concluded that they wanted to take advantage of an educational opportunity that had not been available to their parents.

Genesis frequently witnessed her parents' economic struggles as a result of growing up as one of eight children in a household where her father was the sole earner. Genesis explained that her decision to go to college was heavily influenced by her parents, not only because her father discussed college with her, but also because she was

able to recognize that her parents were unable to provide everything that the family

needed. She mentioned that her parents were constantly worried about expenses.

> Having to see my mom say, "I don't have money for gas today" or worrying
> about the gas or worrying about the bills. Or be really stressed out if we leave the
> light on because that's more money and . . . everything. Just seeing them say "I
> can buy you this but I can't buy them that," or "How am I going to buy the
> uniform shirts and the uniform skirts and all this?" Just seeing that, I was like- I
> want to be able to not worry about that. Not have to be like, "How am I going to
> get them this, how am I going to give them that? Where's this money going to
> come from?" I don't want to worry about paying bills.

Genesis reasoned that if she went to college, she would not have to struggle economically

the way she had seen her parents struggle. A college education, she concluded, would

allow her to provide financially for her future children. Similarly, Nicole stated, "I don't

want to struggle the way my parents did so that's . . . how I got from that idea [to go to

college] to pushing myself to be here [Arizona State University]." Another student

wanted to take advantage of an opportunity not available to her parents. Kulele stated,

"My mom wanted to be a writer. She wanted to be a nurse. She wanted to be all these

things. She couldn't get to and I can . . . [My mom's] like, 'You can. You learn.'"

Despite the research generally showing that the lower enrollment rates for

Latina/os may be explained in part by a lack of information about the economic benefits

of college (Perna, 2006), the findings from this study demonstrate that parental

expectation and encouragement for college attendance was often rooted in an

understanding of the value of education and its expected positive economic returns.

According to students, their parents understood that a high school diploma was not

enough for them to obtain a well-paying job.

Perna (2006) indicated that cultural capital may be manifested in terms of the

value placed on college attendance and that this value may be measured by parental

encouragement for college enrollment. While Perna makes no mention of class when discussing parental encouragement for college, some researchers have deemed cultural capital to be the property of the upper and middle classes (Bourdieu & Passeron, 1990; Coleman, 1988; McDonough, 1997). However, the findings from this study show that participants, many of whom were working class and low-income, also acquired cultural capital from their parents. What is less clear, however, is how participants' parents acquired the cultural capital about the benefits of attending college even though they themselves were not college-educated.

Only a few of the students whose parents demonstrated an understanding of the value of education and how it is expected to pay off indicated that their parents had any direct contact with individuals beyond their older children who had college experience. One student indicated that her mother had a lot of friends whose children graduated from ASU, but she did not connect her mother's knowledge of the economic benefits of college to these social networks. Furthermore, participants did not communicate that their parents acquired knowledge about the benefits of attending college from contact with their older children. Moreover, no participants reported that their parents pointed to their older children with college degrees as examples of individuals who had benefitted from investing in higher education. Although the origin of parents' cultural capital is not clear, this study advances the notion that low-income and working-class parents can possess cultural capital that promotes college attendance (Kiyama, 2008; Nora, 2004; Tierney & Hagedorn, 2002).

In addition to parents, older siblings who were attending or had attended college proved to be a key familial influence during the predisposition stage. Among 14 of the

17 participants, the influence of older siblings was often evidenced through their capacity to establish expectations for college attendance. Two primary ways that siblings established expectations was through sibling-student conversations and by role modeling college attendance.

Roger, whose four older siblings attended college, illustrates the important influence of older siblings on his decision to go to college:

> All my life my siblings had always pounded into my head that I'm going to college. I didn't have a choice not to go. They went through all of it before me. They did go to college but they didn't start right after high school. That was something else that they always pounded into my head. Once you graduate high school you're not going to take a break. You're going to go straight to college. . . . They were the ones that sent me to go to college.

Cindy also recognized that her older sister expected her to go to college. She shared, "By the time my sister went to college, she had already encouraged me enough by just saying, 'Go to college' and that's it. She wanted me to go to college because I assume she wants the best for me." According to four participants, they previously had the intention to go to college, however having an older sibling go to college made them realize that they had to start planning for college. Evelyn, for example, first thought about going to college in elementary school, and she thought about it again when she began high school and saw older students applying to college. In addition, she shared that her parents expected her to continue her education beyond high school, but it was not until her sister began college that she realized she had to take specific actions to get prepared for college. She recalled, "After she [her sister] went, I had to go. . . . because I did not want to disappoint my parents. I knew that if I did not go to college I would be a failure to them."

Other students, like Victor, talked about how college attendance by an older sibling gave them the confidence that they too could "do" college. Victor stated, "[My

sister] came out of this town. She made something of herself; I can do it too. . . . I can definitely do this." Erika also expressed that seeing her brothers go to college gave her the confidence to go to college, "They had a huge impact. I knew because they had gone and because they were able to be successful that I was going to be able to as well."

Older siblings were also important in helping indecisive students solidify their post high school plans. Arnold, whose older sister entered ASU when he was a high school senior, explained how his older sister's decision to attend college influenced him:

> She was going to college and I wasn't sure about myself maybe. I was still at "I don't know whether I should go or I should not." I think by the senior year . . . I saw her go and I wanted to go after that. I didn't want to get left behind or something. *[Laughs.]*

Arnold credited his older sister and mother as the primary influences on his decision to go to college. Arnold noted that his mother encouraged him from an early age to get good grades so he could go to college, but his sister's college attendance proved to be the catalyst for Arnold's decision to go to college. Cassie indicated that her older siblings also helped her to solidify her post-high school plans:

> I knew that I wanted to further my education, and I wasn't really sure what [I wanted to do]. But I knew, having seen them both go to some sort of schooling after high school, that I too . . . it was something that I wanted to do as well.

Cassie was aware that she was expected to continue her education beyond high school because her parents constantly told her that she had to go to college and get a degree, but she acknowledged that her parents did not have an understanding of postsecondary institutions and credentials. According to Cassie, her parents used the term "college" and "degree" broadly when discussing their expectations that she continue her education in some way. Cassie speculated that to her parents "college" referred to any school someone attended after high school and "degree" referred to any postsecondary

credential. Consequently, Cassie could not rely upon her parents to help her explore postsecondary educational options. As a result, it was not until her sisters went to community college that she made the decision to go to college rather than taking another postsecondary education path, such as attending a vocational/trade/career college, an option that Cassie said would have been acceptable to her parents.

Older sibling influence on college attendance was important even for the twelve students whose parents also supported college attendance. While parental encouragement and expectations played a critical role in students' decision to go to college, seeing older siblings go to college led students to believe that college attendance was a realistic option. Perna (2006) argues that believing that pursuing postsecondary education is a realistic option is a form of cultural capital that can potentially influence enrollment decisions.

The influential role of older siblings with postsecondary experience has been confirmed in earlier studies. For example, Kaczynski (2011) found that older siblings reinforced predispositions to attend college that already existed. Similar to the students in Kaczynski's study, most of the students in this study had parents who expected that they would attend college.

The ability of older siblings to reinforce the expectation for college attendance is particularly important for first-generation college students because research suggests that encouraging first-generation students to aspire to a college degree has the potential to increase enrollment rates for this population (Choy, Horn, Nuñez, & Chen, 2000). Research has shown that in the predisposition stage of the college choice process, parental encouragement and support have the greatest influence on the development of

college plans and aspirations for all students (Hossler et al., 1999). Nonetheless, participants also benefitted from receiving encouragement and support from older siblings. Specifically, 12 of the 17 participants were able to gather from their older siblings - by listening to what they said and observing what they did - the information they needed to make the decision to go to college.

Peers

This section discusses the influence of peers on the predisposition, or decision, to go to college instead of taking other paths (Hossler & Gallagher, 1987). Peers emerged in this study as having only some influence on the predisposition stage. Using the literature as a guide (Hossler & Gallagher, 1987; Nora, 2004; Perna, 2006), students were asked whether their peers (e.g., high school friends or classmates) influenced their decision to go to college. Six of the 17 participants indicated that their high school peers influenced their decision to go to college. Arnold remarked that his friends expected him to go to college: "Most of my friends thought that I would go to college here [ASU] too – go beyond high school." Michelle, who attended an affluent high school, but was low-income, was motivated by her upper-class peers to go to college:

> They've been programmed to go to college. It was new to [my sister and me] because my parents didn't go. With their talk and then how they live and the comfort that they have, we wanted [that comfort] also . . . when you're in high school, you're really, really influenced by everyone else in high school, especially high school.

A few students expressed that their peers actively encouraged them to go to college. Kulele stated, "My friend . . . would be like, 'What are your plans? You're going to school' and if I'm, 'School sucks' - one of my dramatic days - she'd be like, 'No we're doing this [going to college] and being successful."

Arnold perceived that his friends encouraged his college plans despite rarely

discussing with them whether he should go to college. Kulele, on the other hand,

discussed and shared college-going aspirations with a friend. Through these discussions,

she established a sense of "we're in this together" with her friend, and she was motivated

and held accountable by this friend. Michelle also did not report discussing her college

aspirations with peers, but her account of being inspired by her peers to go to college

captures the importance of having friends who plan to go to college (Hossler et al., 1999).

For low-income students such as Michelle, having friends who are planning to go to

college may be especially effective in raising educational expectations (Perna, 2006).

Despite the fact that six students cited their peers as influencing their decision to

go to college, like Arnold and Michelle, most participants did not report speaking to their

peers about going to college. Edwin explained, "We didn't really talk about college. . . .

We were going to move on and that was it. . . . Everybody just knew that everybody was

going to college." Cindy shared that she thought that her friends supported her decision

to go to college because they never discouraged her from going to college, "I guess

everybody knew I was going." Consistent with Hossler et al.'s (1999) findings on the

effect of peers in the predisposition stage, there was no connection in this study between

the amount students talked to their peers and students' college aspirations.

The above examples demonstrate the range of influential experiences students

encountered during the predisposition stage. Five of the 17 participants had friends who

expected them to go to college while one was motivated to attend college because

affluent peers served as an example of the benefits of college. Only one student, Kulele,

reported having in-depth conversations about her college plans with a friend. Kulele

relayed that she received support and encouragement for college from her friend during these conversations. These findings suggest that for students, peers influenced them directly or indirectly. Within this study, direct influence refers to conversations in which peers encouraged or excepted college while indirect influence refers to situations in which no conversation took place but the student nonetheless perceived that a peer affected the decision to go to college.

In examining the effect of peers on the predisposition stage, Hossler et al. (1999) found that students with friends who planned to go to college were more likely to have college plans themselves. Cassie had two close friends who were planning to attend college.

> I have two of my friends that are really close and we all came here together . . . among my friends it was kind of like we were all getting ready to go to college at the same time . . . so if I hadn't been applying to universities and stuff it would've been a little weird.

Evelyn recalled thinking about planning for college because students in her classes were planning to go to college.

> I guess [I got the idea to go to college] just because everybody . . . was going. 'Cause when I was in high school, I was in the Honors programs and stuff and AP classes. . . Everybody was like, "We're going to apply to this college."

Gomez (2005) found that some Mexican American students may be subject to anti-school peer pressure from peers who are not planning to go to college. However, in this study, only one student, Victor, received anti-school messages from peers who were not planning to attend college. This negative feedback, however, did not discourage him from going to college:

> I guess there was always people in school that talked down about it [going to college]. Like, "Oh! Why do you want to do that?" Or, "okay sure. . . have fun

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with that." But nothing too discouraging, I guess. . . So, I was really lucky in that I had a positive atmosphere and a great support.

Overall, participants who shared their college aspirations with peers who were not planning to go to college found that their peers either supported their college plans or offered no opinion on their decision to go to college. Support for college plans usually came from close friends as opposed to casual acquaintances.

Students may have reported that peers did not negatively influence their college aspirations because the main peer group of many students was made up of students who had similar college aspirations. Roger, for example, purposely distanced himself from friends who were not doing well in school and formed closer relationships with students in his AP classes. Roger shared,

> My senior year core group of friends, they are basically all here [at ASU] with me. A few years ago I had other friends who I kind of separated from because they started making bad decisions and they weren't doing too well in school and stuff like that. It wasn't that I stopped talking to them because of that, I still talk to them but they weren't in any of my classes because senior year I was all AP. They weren't in any of my classes so I didn't really talk to them very much. Then I kind of became good friends with these other AP kids and that's who I'm here with.

Some of the research on the influence of peers on Mexican American students suggests that peers serve as an influence on the development of college aspirations, often because students are a part of a strong peer group whose members mutually support each others' college aspirations (Contreras-Godfrey, 2009; DiMaggio & Mohr, 1985; P. A. Pérez, 2007). In addition, the college choice literature indicates that as transmitters of social capital, peers play a role in students' decision to go to college (Perna, 2006). On the whole, while participants identified peers as having only some influence on their decision to go to college peers who were planning to attend college played a role as

transmitters of the social capital that promotes college enrollment (Perna, 2006). This

conclusion is supported by previous work in the college choice literature that has found

that students are more likely to enroll when their friends plan to go to college (Hossler et

al., 1999). Similarly, McDonough (1997) proposed that having friends with high

educational expectations may be effective in raising the educational aspirations of

students.

School Context (Teachers and Counselors)

This section discusses the influence of aspects of the school context, specifically

teachers and counselors, on the predisposition, or decision, to go to college (Hossler &

Gallagher, 1987). None of the students, when asked directly, indicated that a high school

teacher or counselor influenced their decision to go to college. This finding is consistent

with research that has reported that high school teachers and counselors have little to no

influence on students' predisposition to go to college (González et al., 2003; Hossler et

al., 1999; Hossler & Stage, 1992; Mendez, 2003). However, it is notable that although

students did not name high school teachers and counselors as having influenced their

decision to go to college, eleven participants acknowledged that their high school

teachers and counselors (and in one case, a coach) expected and encouraged them to go to

college.

Cassie described the role her high school played in encouraging college

attendance. She explained that once she entered high school, she found that, like her

parents, her high school also expected her to go to college. She explained that she was

getting messages about college all the time in high school.

> In my high school it was such a big thing to where they were always talking about
> college. . . . 'cause I was in AP and Honors classes it was always . . . "You're

getting ready for college. . . . You're getting ready for when you go to college."
Just going straight into the Honor classes helped because it was always "Not if
you go to college, it was *when* you go to college. When you're going to do this."
It was never a choice really.

Cassie's remarks offer an example of the importance of school structures and resources in

facilitating the college choice process of students (Perna, 2006). AP and Honors

teachers; the message that she was going to go to college; and beginning high school with

Honors classes were the school structures and resources that seemed particularly

important in supporting Cassie's college choice process.

Previous research (González et al., 2003) suggests that participation in AP and

Honors courses results in substantial advantages when compared to participation in a

general curricular program. All of the participants, with the exception of three students,

participated in Honors and/or AP courses, which included taking one AP/Honors course

to taking a full course load of AP/Honors classes. The access to more rigorous curricula

and encouraging teachers that students described they encountered in their Honors and

AP classes suggest that these structural characteristics of the schools (Perna, 2006) that

the participants attended shaped their college choice process.

Ten of the 11 participants who reported that high school staff expected or

encouraged them to go to college cited teachers and counselors. Seven of the 11 students

who said that high school staff encouraged college specified teachers. Evelyn shared that

her teachers assumed she and her classmates would go to college, "Our teachers always

just said, 'When you go to college, this is what you're going to do.' I guess it was

assumed." Three of the 11 students that said that high school staff expected or

encouraged college attendance specified counselors. Genesis explained that her

counselor told her about the requirements for her to be admitted to a college. For

example, she recalled that he told her, "You need two years of a language to get into a university." She assumed that because her counselor was focused on college admission requirements when advising her about the selection of coursework, the counselor was preparing her for college. Genesis indicated that her counselor "talked like it was a given that [my classmates and I] were going to go to college."

Researchers have established that high school teachers and counselors have little to no influence on the predisposition of students to go to college (González et al, 2003; Hossler et al., 1999; Hossler & Stage, 1992; Mendez, 2003), but there is often a failure to explain *why* teachers and counselors do not have an influence. Eleven participants reported that teachers, counselors, and other school staff expected or encouraged them to attend college, but none of the students indicated that a high school teacher or counselor influenced their decision to go to college. The finding that students did not believe that a high school teacher or counselor influenced their decision to go to college is curious and warrants further attention. This study does not answer the question of why teachers and counselors do not have an influence but the finding may be at least partially attributed to that fact that students typically make the decision to go to college no later than the ninth grade (A. F. Cabrera & La Nasa, 2000a).

Ten of the participants had already decided when they began high school that they were going to attend college, which is consistent with well established research indicating that most students decide in grades 7-9 that they are going to go to college (A. F. Cabrera & La Nasa, 2000a). Since these students had already decided on their postsecondary plans, high school teachers and counselors were unable to influence these plans. However, the postsecondary plans of seven students were still evolving when they

entered high school, indicating that high school teachers and counselors could have influenced the postsecondary plans of these students. While these seven students successfully enrolled in college despite the absence of teacher and counselor influence on college aspirations, we need to understand why their high school teachers and counselors did not help solidify their college plans because teachers and counselors can impact students' college aspiration development (McDonough, 2005). In a study that examined the experiences of students as they chose colleges, McDonough (1997) suggested that an overall examination of the school context can help explain why some schools are better than others at helping students develop their college aspirations.

The college aspirations of students can be influenced by the standards and practices of a high school with a college culture (McDonough, 1997). McClafferty, McDonough, and Nuñez (2002) defined a college culture as having a "school culture that encourages all students to consider college as an option after high school and prepares all students to make informed decisions about available post-secondary options" (p. 1). McClafferty et al. further suggested students are more likely to consider the advice from teachers and high school counselors as important – and therefore influential – if there exists a college-going culture because in a high school with a college-going culture students are constantly hearing about college. The purpose of this study was not to engage in a deliberate examination of the school context, but the data collected indicated that it is likely that several participants did not attend schools with a college culture.

As research indicates, low and high minority schools appear to differ considerably regarding the presence of a college culture, with high minority schools generally not having a college-going culture (Hill, 2008; Holland & Farmer-Hinton, 2009; Roderick,

Coca, & Nagaoka, 2011). As a result, students enrolled in these schools tend to receive limited college support (Hill, 2008; Holland, 2011; Holland & Farmer-Hinton, 2009). Given that students in high minority high schools are often the least likely to be immersed in a school culture that prepares them for college enrollment (Holland & Farmer-Hinton, 2009), it is not surprising that five of the seven student who had not decided by the end of their first year of high school to attend college attended a high minority (over 50% Latina/o) high school (GreatSchools Inc., n.d.; National Assessment of Educational Progress, n.d.).

Any school, including high minority high schools, has the potential to have a college culture. Participants, for instance, indicated that in their public, high minority high schools, teachers and counselors expected and encouraged college attendance, one feature of high schools with a college culture (McClafferty et al., 2002). However, a true indicator of a college culture is the extent to which students report that they benefit from the college culture elements present in their schools (Holland & Farmer-Hinton, 2009). Participants who attended public, high minority high schools may not have indicated that teachers or counselors influenced their decision to go to college because teacher and counselor expectations and encouragement for college likely were not embedded in a college culture, making it less likely that teacher and counselor support and encouragement would matter to the student (Roderick et al., 2011).

Two additional aspects of a school with a college culture are that all high school staff are constantly talking about college and that all students are prepared for college (McClafferty et al., 2002). Findings from this study show that these aspects were not present in students' high schools, making it less likely that teacher and counselor support

and encouragement will matter to the student (Roderick et al., 2011). For example, Cassie stated that staff at her high school were always talking to her and her classmates about college. However, when she was asked if anyone at her high school specifically told her that she should go to college, she only named her science teacher, who also was the coordinator of the outreach program in which Cassie participated. Therefore, Cassie did not receive college-going messages from <u>all</u> of her teachers. Kulele described a school in which not all students were prepared for college. She described how she was prepared to make decisions about college options because she was in the top 10% of her class.

> When you go to the counselor's office there's all these schools and stuff and like I said by my senior year my counselors were like, "Let's do workshops . . . let's take all the seniors out of class, let's take the top 10% [of the senior class]" and do this. They were just constantly, "Go to college, go to college, you guys can do it."

It is apparent from Kulele's description that activities meant to prepare students for college were focused only on the students in the top ten percent of the senior class. The findings from this study indicate that several students in this study were given the support, information, and resources necessary to prepare for college because they were identified as qualified for college. However, there were other students in this study who did not participate in outreach programs or were not in the top ten percent of their class that could have also benefited from college preparation.

While the absence of a college going culture can help explain why teachers and counselors did not appear to influence the college aspirations of the students in this study, *how* teachers and counselors communicated college expectations and encouragement also seems to be important in explaining this finding. The lack of a relationship between

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teacher and counselor support and college aspirations has been attributed to an inadequate amount of interaction between teachers and counselors with students (Hossler et al., 1999). In addition, McClafferty et al. (2002) have advocated for individual meetings as invaluable in raising students' college awareness. The findings of this study indicate that teachers and counselors generally communicated college expectations and encouragement to students as a group rather than during individual conversations.

Students indicated that they typically did not speak to teachers and counselors one-on-one about attending college, unless the participant initiated the interaction. Teachers and counselors tended to communicate general college expectations and encouragement while students were in a group setting, such as a class. Michelle did not have an individual or one-on-one conversation with a teacher or counselor about whether she should go to college. Instead, she explained that when a teacher or counselor told her she should go to college, she was in "a big group." Alex also received messages from his teachers in a group setting, "My senior year, the only teacher that talked to me - that was talking to the whole class, it wasn't personal, was my English teacher." Similarly, when asked whether a teacher or counselor ever told him that he should go to college, Edwin replied, "Not per say, 'You should go to college.' They would pretty much imply to the whole class, like, 'You guys are going to go to college.' They . . . expected it from us."

As research has shown, aspects of the school context (e.g., availability and types of resources, structural supports and barriers) can shape the college choice process of students (Perna, 2006) by enhancing or limiting the access of students to cultural and social capital (N. L. Cabrera & Padilla, 2004; McDonough, 1997; Perna & Titus, 2005). In this study, counselors and teachers transmitted necessary college-related social capital

to students by encouraging them to attend college (Perna, 2006). Nevertheless, students did not perceive this aspect of the school context to be an influencing factor in their decision to go to college. These results indicate a need for further attention to the influence of teachers and counselors during the predisposition stage because teachers and counselors have the potential to create strong norms for college attendance among Mexican American first-generation students (Roderick et al., 2011).

Search

Drawing on the concepts of cultural and social capital within Perna's (2006) conceptual model of student college choice, this section presents the influence of family, peers, teachers, and counselors on the search phase. During the search stage of the college choice process, students look for information about college (A. F. Cabrera & La Nasa, 2000a; Hossler & Gallagher, 1987). Consistent with previous research, this study considers the sources of information that students used for information about college (Hossler et al., 1999; A. F. Cabrera & La Nasa, 2000a), financial aid (A. F. Cabrera & La Nasa, 2000a), assistance with college processes (Perna, 2006), and the likelihood of applying to a sibling's institution (Kaczynski, 2011).

Family

Parents were influential in the participants' decision to attend college, but they generally did not provide participants with information about college or assist with search phase activities. In five cases, participants explicitly stated that their parents were not familiar with the college choice process. In other instances, students went directly to older siblings who may have been viewed as an expert rather than having college information filtered through an intermediary. Support for this proposition is supported

through research that suggests that school-related information is commonly received from older siblings rather than parents because, relative to parents, older siblings are more experienced and familiar with school issues (Tucker et al., 2001).

Another possible rationale for why parents were generally not sources of information or assistance for the participants despite having access to older children with college experience may be based on Latina/o cultural beliefs and practices which may lead older siblings to assume what might be described in Western cultures as a parent-like role (Tucker et al., 2001; Updegraff et al., 2006). As evident in participants' responses, some students viewed siblings in a parent-like role during the college choice process. Alex noted that his older sibling provided valuable information that his parents could not provide because they did not go to college, "In a way it's kind of true because he kind of substituted [for my parents not going to college]." Kulele benefitted from her older brother's knowledge of the college choice process. She described how her brother sometimes took on a parent-like role when he helped her with college search activities.

> "[My brother] was the one that was more into [influencing my decision to go to college]. Because even though he had been in school, my parents were still like, "You have to go to school" but they didn't know a lot about it. They weren't as informed as him. It's like, 'You have to go to your counselor, you have to get your transcripts,' and he's done all that . . . as a parent figure."

It is not surprising that these siblings were central figures in students' search stage. Since older siblings had the experience and familiarity with college, they had knowledge of search stage activities. Likewise, some parents in this study may have drawn directly on older siblings' assistance to help their children indirectly.

Whereas most parents in this study were unable to provide information about college or assistance with college processes, in four cases parents had information about

college or assisted with search stage activities because older siblings (and in one case a teacher) transmitted necessary college-related social capital to parents. The finding that any parents were able to provide information or assistance during the search stage was unexpected given previous research indicating that Latina/o parents without college experience are unable to provide their children with information or assistance during the college choice process (Ceja, 2001; Cohen, 2009; P. A. Pérez, 2007).

Nicole reported that her mother edited her scholarship essays and assisted her with completing the FAFSA online. She explained that her mother knew financial aid information based on her prior involvement in the college choice process of Nicole's older sister. Arnold indicated that his mother was able to provide information during his senior year because "she already knew stuff from my older sister . . . she was asking my sister what was the process to get into college so I could do the same thing." Arnold stated his mother not only provided information about college, but also assisted with college processes, "She told me, 'Do this and that' and she took me to some of the SATs that we had to take – she took me there. She did a lot of stuff."

The ability of older children with college experience to serve as sources of information for parents during the college choice process has been documented in previous studies (Ceja, 2006; Cejda et al., 2002). In this study, one participant explained that her mother understood the importance of preparing for college by taking college preparatory courses in high school. Erika noted that her mother "always encouraged signing up for advanced classes because they would help with college credit." Erika explained that her mother knew the relationship between AP courses and receiving college credit because her older brothers had explained this connection and it had been

reinforced during parent-teacher conferences. Findings show that older siblings play an important role in some parents' knowledge of the college choice process. Even though the participants' parents did not attend college, a few had access to information that enabled them to assist their younger children with college choice processes. As a result, a few parents took advantage of the available cultural capital found within the family environment to assist their younger children during the college choice process.

Because parents were generally not sources of information or assistance within the family, most students turned to older siblings for college information or assistance with search stage processes. Twelve students reported that a sibling provided them with information about college or assistance with college search stage processes. Consistent with the literature, older siblings were sources of information about financial aid and college in general (Ceja, 2001; González et al., 2003; P. A. Pérez, 2007).

Ten participants reported that they most often received information about college costs and assistance with financial aid processes from their older siblings. Genesis, for example, noted that she knew college was going to be expensive in part because of an older sister's experience; her sister had shared that college had been "really expensive." Michelle stressed the importance of her sister's assistance in completing the FAFSA, "When it was time to file my FAFSA . . . I knew what I was doing and she helped me, too. . . . [My sister] filled out my FAFSA."

In addition to assistance with financial aid, older siblings also provided general information about college (e.g. the size of college classes, difficulty of course work) and offered advice as the students considered different colleges. Kulele indicated that she was exposed to information about college through her older brother, "I learned things

[about college] from him, [and] from dropping him off [at his college] and from looking."
Some older siblings offered an opinion on the colleges participants' were considering.
Students found these opinions helpful as they contemplated where they would apply.
Victoria stated, "[My sister] wanted me to go to ASU 'cause she said that she felt that
community college was too easy. . . . She's like, 'If you want to be more challenged you
should go to university.'"

Literature on the college choice process of Latina/o students points to the
important role of older siblings. Assistance the participants reported receiving from
siblings is consistent with what Ceja (2001) described as the essential role that siblings
play as information sources in the college choice process. In this study as in others, older
siblings were valuable sources of information about college and assistance with college
search activities to most participants as they navigated the search stage. The information
and assistance that siblings provided included information about college costs, assistance
in filling out the FAFSA, general college information, and assistance narrowing
participants' lists of tentative institutions. Participants seemed to feel more comfortable
with the college choice process if they received information and assistance from an older
sibling who had previously experienced the college choice process.

Perna and Titus (2005) argue that parental involvement is a form of social capital
that promotes college enrollment. The findings from this study support the notion that
the involvement of older siblings in the college choice process may also be a type of
social capital that can assist younger siblings in realizing college aspirations (Sandefur et
al., 2006). McDonough (1997) found that several senior high school students in her
study benefited from an older sibling's experience with the college choice process when

they were planning for college. The findings from this study of Mexican American first-generation students provide additional evidence that older siblings can be a potential source of social capital.

In addition to providing information and assistance during the search stage, older siblings influenced the institutions that students considered for attendance. In some cases, students were drawn to the institution that a sibling attended while in other cases students resisted the sibling's institution as a possible place to attend college. These findings are supportive of previous research that found that older siblings have an influence on the colleges that students consider (Hossler et al., 1999; Kaczynski, 2011; P. A. Peréz, 2007). Thirteen of the 17 participants included the college that their sibling attended on their list of tentative institutions. In several instances, participants reported that older siblings were supportive of their interest in the older sibling's institution. When students expressed an interest in the institution, supportive siblings often shared positive experiences about the institution and confirmed that the institution was a good option for the participant to consider.

Six students considered applying to an institution because their sibling was attending or had attended the school. Some students wanted to attend college with their siblings. Erika explained that she wanted to go to ASU's Tempe campus because she liked the city of Tempe, but also because her brother encouraged her to apply, "[I wanted to go to ASU] because my brother was already up here and he was already, of course, encouraging me to come here." Kulele indicated that before she became aware of other options, she only considered ASU because her brother was attending.

> I think it was my sophomore year when people ask me, "Where are you going?"
> I'd be like, "ASU because my brother's going there. . . . It's the best school

because my brother goes there." It's just seeing him wear his gold shirt or just knowing that he went there, I'd be like, I want to go to ASU."

Alex, on the other hand, was aware of other available options, but only considered attending ASU:

> I wanted to go to ASU because [my brother] was there. . . . That influenced me a lot, knowing that I had family support up here. That helped me to come up here. That's why I didn't really bother to apply to any other colleges.

Alex was drawn to ASU because he saw his brother as source of support, which demonstrates the significance of having a family member attending an institution. Alex's comment affirms results from Kaczynski's (2011) study regarding the influence of siblings on a students' college choice process. Kaczynski's study revealed that students were drawn to their sibling's institution because they saw the sibling as a source of comfort.

Results also suggest that students with an older sibling will consider their older sibling's alma mater even if they will not be attending that particular college with their sibling. Victor explained that he first planned on attending the institution from where his sister graduated, "Just because my sister went to NAU, I was NAU bound." He also considered starting at a community college, the same one his sister attended prior to transferring to NAU, based on her endorsement of this school, "She thought [the community college] was a great idea." Similarly, Edwin described his sister's influence on his decision to consider ASU, "She did mention that she went to ASU and she wanted to continue the lineage and . . . that was it. Just to go to ASU." Though other factors informed Edwin's decision to consider ASU, he considered ASU because his sister expected him to attend ASU.

Three students reported that they considered attending their sibling's college, but

not because of their sibling's attendance at the institution. Mariela, for example, initially considered ASU because the summer before her sophomore year in high school she participated in an ASU summer program. However, she learned of the summer program because her sister also participated in a summer program prior to beginning her first year at ASU.

> My sister was already enrolled . . . she was going to become a freshman . . . She did a summer program for ASU, and I was like, "If she's going to do a summer program, why can't I do a summer program?" I started looking up summer programs . . . and I found a program that was Women in Science and Engineering. . . . I stayed on campus for a week. . . . That was when I was like, "I definitely want to go to college. I definitely want to go to ASU."

Arnold reported that he considered ASU because he relied on his sister for most of his information about institutions and she knew the most about ASU.   According to Arnold, he only applied to one institution based in part on his sisters' limited information about other institutions. He shared, "I applied to ASU and got in there and then, yeah, that was the only one that I applied to. For the other schools, I didn't know much because my sister, she knew mostly about ASU."

Ceja (2006) asserted that having older siblings establish a college-going tradition is important for Chicanas because older siblings who go to college pave the path to college for the younger siblings in the family. This study found that older siblings can pave the path not only to college, but also to a *particular* college. For example, familiarity with ASU was greater among students who had older siblings who had attended or were attending ASU. Having siblings who had attended or were attending ASU expanded the knowledge base that students could tap into as they were considering ASU.

The majority of students considered applying to their sibling's institution, but three participants indicated that an older sibling's current attendance at a particular institution was the key reason that the student did not consider applying to their sibling's college. Participants who did not want to attend college with their sibling indicated that they did not want to follow in their sibling's footsteps or be compared to their sibling anymore. Cindy explained that she did not initially consider ASU because both of her sisters were attending the institution, "I felt like I would be copying my sisters and I wanted something else." Evelyn was very clear with her mother that she would not consider attending her sister's school, a selective, private university in Washington, DC.

> [My mom] asked me if I was going to go to my sister's college, and I was like, "No, I don't want to go. I don't want to go follow her. [*Laughter*] I want to do what I want to.

Kaczynski (2011) reported that some students refuse to consider their sibling's institution based on not wanting to attend college with their sibling. The participants in this study who refused to consider their sibling's institution believed that they could build a new identity if they were not at the same school as their sibling. While most students were likely to consider a sibling's institutions, three students were less likely to consider an institution their sibling was attending. Nevertheless, for both groups of students, older siblings influenced the institutions that students considered for attendance.

Peers

Peers were more important during the participants' search stage than during the predisposition stage. During the predisposition stage, the majority of participants did not report talking to their peers about going to college. However, most students reported speaking with their peers about college during the search stage. Moreover, seven

students looked to peers for college information and one student relied on a peer for assistance with college processes.

Most students reported that they received information during conversations with high school friends who, like them, were also collecting information about college. One student, however, said that she received college information from peers that were a year older than her and another student gained information from a peer who was already in college. Cassie recounted, "I had a lot of friends that were a year older so I remember when they were graduating or getting ready to graduate, them talking about applying and all of that stuff." Patrick received information from a friend who was in college and had the same major that he was interested in pursuing:

> I have a friend who went to Berkeley. . . . he was a French major so I always emailed him like, "What kind of study abroad programs did you do? How did you like it?" His thing was, "You've got to come and you've got to do a master's degree because you can't do very much with a bachelor's degree in a foreign language." I was like, "All right."

Some students exchanged information about college with peers. Edwin described a mutually beneficial peer relationship in which both he and his peer were able to share information about college. He explained, "When I focused on ASU . . . we would just talk about ASU and we exchanged information. I knew something that he didn't and we exchanged and that was pretty much how it went." In contrast, other students found that neither they nor their peers had much information to share about college. Erika recalled having conversations with her two closest friends about the schools and majors they were considering. As Erika saw it, she could not expect her friends to have information about college that she didn't have because, like her, they also lacked college experience.

> [I did] not particularly [learn about college from my friends], in like too much detail about the whole process of applying or what it would be like. They always

would talk about maybe the schools they had in mind to go do themselves but they were my same age. They didn't have any real information either. . . . we were all [in] the same boat [as far as figuring stuff out].

There were a few participants who found that while their peers did not have much information to share about college, they were able to share college information with their peers. When asked whether she received information about college from her friends or classmates, Nicole replied, "No, not really. If anything I was telling them they should go online and look for something." She also recounted how she tried to persuade one of her friends to apply to ASU even though he wanted to perform missionary work immediately after high school. Nicole knew and shared with her friend that ASU recruitment scholarships may be deferred for religious missions.

While seven students looked to peers for college information, only one student relied on a peer for assistance with search stage processes. Gloria indicated that she did most of her college research over the Internet, but she also learned about different colleges and universities from a friend who visited colleges.

> My friend . . . she was going through the same thing as me and so she'd tell me about the colleges she went out [and] visited. . . . They went and visited different colleges and [her father] helped her . . . and then she helped me . . . so I got lucky knowing her.

Gloria also discussed how her friend actively assisted her with search stage processes, such as preparing for the SAT. Gloria took an SAT preparation course because her friend saw a brochure in her counselor's office and told Gloria that they should take the course.

The research on the influence of peers during the search stage is mixed. Cabrera and La Nasa (2000b) assert that one way students seek information during the search stage is through friends. At the same time, other studies have also found contradictory evidence that students do not seek information about college from friends (Hossler et al.,

1999). The findings of this study confirm both perspectives. On the one hand, peers provided specific information about college to several participants. However, most participants did not indicate that peers were the main sources of information or assistance during the search stage. Peers were considered a source of college information for participants, but were mentioned fourth, behind teachers, older siblings, and counselors as sources of information about college. This finding contradicts Ceja's (2001) conclusion that peers are influential sources of college information for Mexican American first-generation students (Ceja, 2001).

It is possible that peers are influential sources for Mexican American first-generation students when first-generation is defined in the strictest sense. The students in this study were not the first in their immediate family to attend college. Their source of information about the college search stage often came from their older sibling. In addition, peers may not have been particularly influential sources of information for the participants because peers were experiencing the college choice process for the first time and had no experience in similar situations. Erika recalled, "We were all [in] the same boat [as far as figuring stuff out]." She was not the only student in the study who mentioned that her friends would be the first in their family to attend college. As a result, most of the students' peers may not have had essential information about how to develop a list of institutions to consider and learn more about. Erika also recalled that her friends "didn't have any real information either [about college]." Students may not have sought out peers for information about college or assistance with search stage processes because they did not think that their peers would be beneficial sources of information. This

suggestion is supported by research (Hossler et al., 1999) showing that friends have little impact in helping students learn about colleges.

Eleven students did not rely on their peers for college information or assistance with college processes, but peers were a useful source of information for several students. Perna (2006) maintains peers may transmit the social capital necessary for college enrollment when students acquire information about college from their peers. As transmitters of social capital, peers played a role in the search stage of most participants.

School Context (Teachers and Counselors)

This section discusses the influence of the school context on the search stage, with a particular focus on the influence of teachers and counselors. Within the school context, students mentioned teachers (15 students) and counselors (11 students) as sources of college information and assistance. Teachers and counselors have also been reported by researchers (Hossler et al., 1999; Johnson & et al., 1991) as a leading source of information for all students. In this study of Mexican American first-generation students, teachers and counselors often provided information about college costs and financial aid (seven students), followed by knowledge about institutions (six students).

Evelyn reported receiving information about the FAFSA process and other information related to paying for college from her teachers and counselors. Victoria found her teachers helpful in learning about scholarships and how to apply for scholarships. Victoria specifically mentioned that a computer teacher encouraged her to apply for scholarships. Nicole described an experience in which teachers and counselors partnered to disseminate scholarship information.

> Our counselor set up a packet and said, "This is what you guys gotta do for FAFSA," or, "This is what you gotta do for scholarships." She would email my

English teacher and say, "These are the scholarships that your kids can apply to right now." Our English teacher would just tell us everything.

Students also learned about institutions of higher education from activities initiated by teachers and counselors. Cindy recalled participating in an activity that highlighted the colleges that her teachers attended.

> I think it was the last year of high school . . . the teachers . . . put what school they went to. A little banner and their mascot and what degree they got and how life was then. I thought it was pretty cool because I've never seen it before. Most of them were excited and had to explain everything.

Evelyn described a class project that required her to research a college she was interested in attending and explore the college's major maps. Erika learned about different colleges and universities from counselor activities.

> [Counselors] were always coming in to classes, talking about different universities that were closer to us and different community colleges that were near us. Different community colleges would actually come as – they would have guest speakers come from different community colleges to try and encourage us to go to their specific community – their college.

During the search stage, students' leading source of information included teachers and counselors (Hossler et al., 1999). Most participants reported receiving information about college or assistance with search stage processes from their high school counselors but they also reported that counselors were not very helpful. In fact, only two participants explicitly expressed being satisfied with their counselor. Like many students, Victoria was dissatisfied that her counselor did not seek her out.

> I didn't have a good counselor for my senior year. . . . My counselor is supposed to be helping me with [scholarships] and he didn't call me in his office at all. . . . I only talked to him that one time I needed to change my schedule, but after that he never talked to me again.

Students often described having to initiate contact with their counselors in order to receive college information or assistance. Participants wished that their college counselor

was more proactive and sought them out first to give them information about college or assistance with search stage processes.

Access to information is an important aspect of the high school context that impacts the decisions that students make during the college choice process (McDonough, 1997; Perna, 2006; Talavera-Bustillos, 1998). Moreover, counselors are frequently considered essential sources of information for students' college choice process (Hossler et al., 1999; Kirst & Venezia, 2004; Stanton-Salazar & Dornbusch, 1995). However, six out of the 17 students in this study did not identify counselors as sources of information or assistance. Furthermore, in most cases, students noted that counselors' influence was negligible in terms of their efforts to provide students with access to information about college.

Although not mentioned by any of the students, high student-to-school counselor ratios may explain why counselors were not found to provide students with satisfactory information about college. The American School Counselors Association recommends a student-to-school counselor ratio of 250-to-1 (American School Counselor Association, n.d.). Arizona's student-to-school counselor ratio in 2009-2010 was 815-to-1, more than three times the recommended ratio (American School Counselor Association, n.d.). Furthermore, six students attended high minority Arizona high schools (American School Counselor Association, n.d.; GreatSchools Inc., n.d.). Research has indicated that in schools with a predominantly minority student population, student-to-school counselor ratios may be higher than in schools with lower concentrations of minority students (Bryan, J., Holcomb-McCoy, C., Moore-Thomas, C., & Day-Vines, N., 2009). It is likely that students' counselors were unable to deliver information about college to students due

to having less time and fewer opportunities to devote attention to college planning activities (Bryan et al., 2009). Bryan et al. noted that counselors are also often engaged in non-counseling responsibilities, leaving little time for college advising. Victoria's contact with her senior year counselor was limited to scheduling courses. She shared, "I only talked to him that one time I needed to change my schedule but after that he never talked to me again." Victoria's experience is not surprising given that over 90% of the students at her high school were Latina/o (GreatSchools Inc., n.d.).

Counselors were not influential for several students in this study and most students were dissatisfied with counselor interactions. Nevertheless, it is important to keep in mind that 11 of the 17 participants sought out and received college information and assistance from counselors. For this reason, counselors did play a role in the participants' search stage. Granted, several students did not receive satisfactory information about college from counselors, but they were able to obtain useful information from their teachers. Thus, students were able to obtain some information from counselors and they expanded their knowledge base with information received from teachers.

The findings concerning the role of teachers as sources of information during the search stage aligns with previous research on where students seek information. Teachers acted as transmitters of social capital by providing information about college (Perna, 2006). Hossler et al. (1999) concluded that students seek information primarily from teachers and guidance counselors when they are learning about colleges. Teachers in this study provided the most information and assistance during the participants' search stage. Teachers mostly provided students with information about college costs and financial aid.

It is not surprising that students mentioned teachers more often than counselors as providing access to information about college and assistance with college processes because students interact with their teachers on a daily basis in the classroom. Participants tend to have less frequent interaction with their counselor. Kirst and Venetia (2004) proposed that students speak with teachers more frequently about college planning than with counselors because teachers are more accessible.

In sum, family members, peers, teachers, and counselors transmitted social capital to students during the search stage by providing information about college or assisting with college processes (Perna, 2006). Teachers were referred to most often as providing college information or assistance. Teachers were valuable resources for students since they were able to provide valued information and assistance to students. Another important source of information or assistance was older siblings. The next three sources most mentioned by students were counselors, peers, and parents. Unlike the information and assistance teachers and older siblings provided, the information and assistance provided by counselors seems to have been inadequate.

Choice

The choice stage involves making decisions about where to apply and subsequently where to enroll (A. F. Cabrera & La Nasa, 2000a). This section presents an explanation of how the availability of cultural and social capital to students via family, peers, teachers, and counselors influenced which schools a student applied to and their subsequent decision to enroll at ASU.

Family

  Application. Eight students indicated that their family (i.e., older siblings, parents) influenced them to apply to a specific school. Roger explained that he "applied at UCLA just for kicks. My brother wanted to see if I could get accepted because that was his dream college." Roger also shared that his brother and sisters had different ideas about where he should go to school. His brother encouraged him to explore college possibilities beyond Arizona. Roger's brother told him, "You should go out. There's more to the world than just Arizona. Get out there." In contrast, his sisters urged him to stay close to home. He recalled their advice: "Stay. Don't go too far away from home."

  During the search stage, students and their families begin to determine preferences regarding the location (i.e., distance from home) of the college they wanted to attend (Hossler et al., 1999). Hossler, et al. argued that location is an important determinant of where students apply and enroll. Students in this study indicated that their family expressed their preferences for how far away they wanted them to be from home. Moreover, the students indicated that their parents' preferences were an important consideration for them when applying to a school. This finding supports López-Turley's (2006) results that suggest that parents' preferences for where their children go to college have a significant influence on their children's college application patterns. Despite this overall finding, there were a few students who indicated that they did not consider their family's location preferences when choosing which institutions to apply to or attend.

  The work of López Turley (2006) provides an explanation of why some families prefer that their children to stay close to home while attending college. López Turley (2006) distinguished between two types of parents, "college-at-home parents" and

"college-anywhere parents." Using this distinction, Roger's can be identified as coming from a college-at-home family (family felt it was important for him to attend school while living at home), while other participants can be said to come from a college-anywhere family (family does not feel this is important). The importance of distance from home will also be discussed in-depth later in this chapter when discussing additional factors that influenced where students applied and enrolled.

Some students were influenced to attend the school that their sibling attended. Cindy indicated that her parents expected her to apply to and attend ASU, where her 20-year-old sibling was attending. Cindy believed her older sisters and parents influenced where she applied.

> Both of my sisters actually [influenced where I applied]. . . . at first I wanted to be a nurse and I wanted to go to UA and they [my parents] told me to come to ASU because my sisters were here. So I guess my whole family [had an influence on where I applied].

Prior research indicates that parents have an influence on the addition of a sibling's college to the list of schools that a student will consider (Kaczynski, 2011). In Cindy's case, applying to ASU was the result of giving into a parental demand. Despite not considering ASU as a potential school for application, Cindy applied to ASU because her parents wanted her to live with her 20-year-old sibling. Her 20- and 25-year-old sisters shared an apartment near one of the ASU campuses, but her 25-year-old sister wanted to move out and have Cindy live with their sister. Cindy was not the only student who felt pressured by parents to choose the college or university that their older sibling was attending, but other students ultimately felt it was their decision to make as to where they would apply. Nevertheless, most students were eager to apply to the school that their older sibling was attending or had attended. Alex wanted to follow in his brother's

footsteps by only applying to the institution that his brother attended, and only "wanted to go to ASU because he was there."

Six of the eight participants who said they were influenced by family said that their older sibling was the main reason they submitted an application to a specific school. Participants mentioned older siblings more often than their parents as influencing where they applied for possibly two reasons. First, most parents were unable to provide information to the participants during the search stage because they did not go to college. Likewise, because they had never gone through the college choice process, parents did not have the experience and knowledge needed to effectively advise students on where they should apply. Second, the data suggests that the influence of older siblings during the search stage is maintained during the choice stage. All of the students who indicated older sibling influence was the reason that they submitted an application to a specific school also indicated older sibling influence during the search stage.

Enrollment. When comparing the findings on the influence of family on application decisions to the influence of family on enrollment decisions the results were similar. All but one of the students who indicated that family influenced their decision to apply to a specific school also indicated that family influenced their decision of where to enroll. In addition, just as there were parents who expected student to apply to the school their older sibling was attending, a few parents expected their college-bound child to attend the school their older sibling was attending. Furthermore, just as there were students who were motivated to apply to a particular school because they had a sibling who had attended or was attending the school, some students were motivated to attend ASU because they had a sibling who had attended or was attending ASU. These findings

validate previous research that reported that factors that influence application decisions also shape enrollment decisions (Hossler et al., 1999; Bergerson, 2009b).

Though most students indicated that their family (i.e., older siblings, parents) influenced where they applied, three students were not influenced by their family's expressed opinions on where they should enroll. Genesis, for example, indicated that her father was concerned about the cost to attend ASU, which prompted her father to suggest a specific school.

> My dad was happy with [me applying and going to ASU]. I think when he saw [the cost of] tuition, then he was like "Maybe [*Community College*] would be better . . .," but I didn't want to. I was just like, "No, I need to be at a university" and stuff like that. He was discouraged when he saw [the cost of] tuition.

Genesis' father encouraged her to attend community college because it cost less, yet she was determined to attend ASU. Even though Genesis was not influenced by her father's preference for where she should enroll, other students were influenced by their family's preference.

Family was also influential on where students enrolled in that parents communicated their preference for the school with the lowest cost of attendance. Family members urged students to consider cost when selecting a college in which to enroll. Student responses indicated that their family's preference for the institution with the lowest cost was an important consideration when selecting ASU for enrollment. However, as Genesis indicates, despite family preference for the school with the lowest costs of attendance, students did not always choose this institution for attendance. Cost of attendance will be discussed again in this chapter when discussing additional influential factors on the decision to enroll at ASU.

The way family influenced students' enrollment choices varied. Whereas most students experienced positive affirmations about college enrollment, a few experienced remarks filled with skepticism about the student's ability to accomplish the goal of college enrollment at a four-year university. For example, for two students – Patrick and Victoria – family was influential on where they enrolled. However, unlike other participants, they indicated that they had family members who were skeptical of their ability to enroll in or be successful at a university. Since both students enrolled at ASU, this lack of support and encouragement did not have a negative influence on their college enrollment. Nevertheless, as they related these stories, it was clear that they were still upset by the remarks. Patrick shared that an older sister who had not gone to college was not supportive of his plans to enroll at ASU.

> One of my older sisters . . . she wasn't discouraging me but she was like, "What makes you think you're going to go to ASU your first year of college?" I was like, "I'm going to come here. . . ." I remember that I felt so good when I was like, "Not coming here? I have a full ride at ASU." I was just like, "Of course, I'm going to go to ASU." When she told me that it really upset me. I was like, "I'm going here" . . . I never looked at ASU like something high until my sister told me I couldn't be here. I was like, "All right. Well, I'm coming."

Patrick's sister questioned his ability to enter ASU directly from high school instead of attending a community college first and then transferring to ASU. Patrick shared that the usual path to college for people from his hometown was to attend a community college after graduating from high school. He had chosen to go against the norm and pursue enrollment in a university directly after high school. Patrick did not initially consider attending ASU, but decided to apply when he realized he would not be able to afford the other universities (e.g., FIDM/Fashion Institute of Design & Merchandising) that he had hoped to attend. Patrick had no real desire to attend ASU; however, knowing that his

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sister did not expect that he would be able to attend ASU motivated him to attend ASU so that he could prove to his sister that he was capable of enrolling in a university directly after high school. This conversation with his sister could have resulted in Patrick lacking confidence in his ability to attend ASU. Instead, it made him determined to prove his sister wrong and enroll at ASU.

Similarly, Victoria also faced skepticism from a family member about her ability to enter a university. Victoria's mother felt that she was not ready to enroll at a university. To Victoria, this skepticism was based on her mother's knowledge of Victoria's older brother's experience at ASU. Despite Victoria's brother's academic success in high school and later attendance at ASU immediately after graduating from high school, he failed most of his college classes. According to Victoria, she was not as academically talented as her brother, which caused her mother to fear that she, too, would fail out of ASU if she enrolled directly after high school.

Like Patrick, Victoria's mother's skepticism could have resulted in Victoria questioning her ability to attend ASU. Instead, Victoria also experienced an increased sense of motivation to attend ASU so that she could prove to her mother that she could be successful at ASU:

> [My parents] both [had an influence on my decision to attend ASU] because my mom she did want me to go to community college. I told my dad. My dad's like, "Just go to ASU." I was like, "You know what? I think I am going to go there so I can prove my mom wrong. I graduated and I did it without going to community college." I wanted to go, just to prove her wrong. *[Laughter]*

While Patrick found motivation within himself to counteract his sister's skepticism, Victoria received support from her father. Both students were able to dismiss the apprehensions that others in the family had about their ability to enter a university, and

continued to pursue their college goals. This resilience in the face of skepticism has been confirmed by other college choice studies that have addressed students' ability to dismiss others' apprehensions and continue to pursue their college goals (Burrell-McRae, 2009; Ceja, 2001; P. A. Pérez, 2007). For example, Ceja (2001) reported that as they were navigating the college choice process, the Chicana students in his study viewed and interpreted potentially discouraging circumstances as empowering. Likewise, Burrell-McRae (2009) observed that students in her study believed that they could achieve anything, despite being discouraged to apply to a selective college.

Peers

    Application. After family, peers were the most commonly identified influence on the where participants applied. Seven students indicated that their peers influenced their decision to apply to a particular institution. However, five of these seven students stated that their friends had "some" or "a little" influence on their decision to apply to a particular institution, more so than directly influencing their college application decisions. Three of the seven students indicated that they decided to apply to a college or university because they had at least one friend who had applied to the institution. Kulele's best friend influenced where she applied to college.

> My bestest friend in the world was going to NAU. I was like, "I don't want to make new friends. I don't want to start over. No one I'm really close to is going to ASU." [Only] three people I knew came here. I was like, "I'm going to be all alone" and so we did the applications.

Mariela commented, "Fordham, I just applied to it 'cause my friend applied to it, and I was like, "Why not?" Similarly, when asked if his friends encouraged him to apply to a specific school, Roger said his friends wanted him to apply to ASU. Roger shared, "Because they were all applying to come here. They said, 'ASU. Let's go.'"

The above examples demonstrate the various ways in which student said that peers influenced college application decisions. Students said their friends were an influence because these friends would be someone the student would know at the school, made them aware of application options, or directly encouraged them to apply to the institution to which their friends were applying.

Students acknowledged that their peers influenced their decision to apply to a particular institution, but they did not report consulting their peers as they were making application decisions. Only two of the students that indicated that their peers had some influence on where they applied mentioned that they discussed the colleges they were considering with their friends. Whether or not students had detailed discussions with peers did not determine if students would be influenced by peers.

Students did not attach great importance to the influence that their peers had on the colleges to which they applied. This notion of peer influence aligns with Hossler et al.'s (1996) review of research on student college choice, which revealed that peers did not appear to have an impact on students once they reached the choice stage. Yet, Hossler, et al.'s (1999) study of high school students indicated that peers influence the choice stage. Moreover, other researchers (P. A. Pérez & McDonough, 2008) have shown that Latina/o first-generation college students relied heavily on peers for creating their list of institutions for application. The results of this study provide evidence that

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peers can influence the choice stage. The same results also demonstrate that peers did not have a great deal of influence on students' decisions on where to apply.

Enrollment. As was the case with family, several similarities were found when comparing the findings on the influence of peers on application decisions and the influence of peers on the decision to enroll at ASU. First, as a group, students were as likely to report that peers influenced their decision to apply to a specific institution as they were to mention that peers influenced their decision to enroll at ASU. It is important to note that it was not necessarily the same students reporting peer influence on both application and enrollment. Only two of the seven students that indicted that peers influenced their application decisions also indicated that peers influenced them to enroll at ASU. Second, as was the case when discussing the influence of peers on application decisions, students typically decided to attend ASU because they had at least one friend who decided to attend ASU. Third, just as students did not report consulting peers as they were making application decisions, students did not report speaking to their peers as they were making enrollment decisions. The finding that only two of the seven students that indicted that peers influenced them to apply to a specific school also said peers influenced them to enroll at a specific school provides mixed support for the contention that application factors also shape enrollment decisions (Hossler et al., 1999; Bergerson, 2009b). It is possible that this connection might not be as strong for the college choice process of first-generation students.

With specific attention to enrollment, seven students indicated that peers influenced their decision to attend ASU. It was not that they were directly influenced to attend ASU, but rather peers reinforced their decision to attend ASU. Overall, students

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reported that friends had only "some" or "a little" influence on their decision to enroll at ASU, but they also indicated being reassured by the fact that friends would be enrolled at ASU. The participants thought that knowing others on the campus would make it easier to adjust to ASU. Genesis' friends influenced her decision to attend ASU:

> I think it encouraged me that they were going to go 'cause then I was thinking, "I'll know people there and we can help each other out since we know each other." So they, my friends definitely encouraged me to go. Made me feel more comfortable with my decision 'because I knew that they were going to go, too.

Previous research indicates that friends can be a source of support for students once they enroll in college (Person & Rosenbaum, 2006). In this regard, having peers reinforce the decision to enroll in a particular college is helpful because students can rely on peers who have also accessed higher education. For Genesis, having friends who would also be attending ASU created a prospective support system. Gloria was also comforted in knowing that someone she knew would be attending ASU. Like Genesis, Gloria also noted that she made the decision to attend ASU without peer influence but a friend reinforced her decision.

> The friend that had helped me out . . . she was going to ASU . . . she didn't encourage me to go that much, but it was nice to know that she'd be there, because we're just close. So, it'd be nice to have someone there.

As noted earlier, attending college with an older sibling was important to some participants because they thought their sibling would support them as they adjusted to college. The significance that students assigned to having a sibling at the institution they attended resembles the significance that Genesis and Gloria assigned to having peers at ASU. Having an older sibling who had attended or was attending ASU encouraged most students to consider, apply to, and attend ASU. Conversely, there were students, like Genesis and Gloria, who did not have an older sibling who was in the same situation and

thus could not rely on an older sibling as a source of support at ASU. Results from this study indicate that students depended on friends when they did not have a sibling who was attending ASU. Specifically, only two students with siblings attending ASU said that they found it reassuring that a friend would also be attending ASU.

School Context (Teachers and Counselors)

Application. Teachers and counselors had little or no influence on the institutions to which students applied because they rarely recommended that students apply to specific colleges or universities. Only four students indicated that either a teacher (two students) or a counselor (two students) influenced them to submit an application to a particular institution of higher education. Most students indicated that teachers and counselors were supportive of college attendance but they rarely offered advice about where the student should apply. Cassie's teachers, for example, did not encourage her to apply to any institution in particular, but Cassie thought her teachers would have been supportive of any college that she chose. She reported, "Most of my teachers were very. . . . They showed many universities in school. They showed both ASU and UA, and NAU, and they were very open about all the colleges."

Teachers and counselors were helpful in terms of providing information about colleges and universities, but Cassie did not believe that her teachers and counselor had any influence on where she applied because instead of communicating a preference for a particular school "they were very open about all the colleges." Nicole's teacher advised her and her peers to attend college.

> My English teacher . . . would push *us* [emphasis added] [to apply to college] but it was never like, "Don't apply here," or "You definitely have to apply here." It was more like, "You know where you want to go, you know what you want to do, find the school that has the best program and apply."

Nicole's teacher assisted her in thinking about college in general, but her teacher did not provide any advice about applying to a particular college.

Students did not seem troubled that their teachers and counselors generally did not suggest that they apply to a particular school. None of them expressed wishing that their teachers and counselors had suggested that they apply to additional schools. The reason teachers and counselors did not suggest that students apply to a particular institution of higher education may be rooted in how teachers and counselors talked about college with students.

As noted in the section in which I discussed the influence of teachers on the decision to go to college, students shared that they typically did not talk to teachers and counselors one-on-one about attending college. Participants revealed that the role of teachers and counselors in the college choice process mainly involved communicating general college expectations and encouragement when students were in a group setting such as a class. Nicole noted that her teacher "would push *us* [to apply to college]" suggesting that she was in a group setting when she received college-going messages from her teacher. Hossler et al. (1999) suggested that the lack of a relationship between teacher and counselor support and college aspirations may be that teachers and counselors do not interact enough with students. The findings of this study suggest that teachers and counselors did not interact enough with students about their college application options. Consequently, they had little or no influence on the institutions to which students applied.

However, the finding that teachers and counselors had little or no influence on the institutions to which students applied is contradictory to some research that has examined

the interactions of Chicanas with institutional agents such as teachers and counselors throughout the college choice process. In his study of the college decision-making process of first-generation Chicanas within the context of the home and the school, Ceja (2001) found that advice from institutional agents at the high school played an important role in helping Chicanas decide where to apply. In fact, the study revealed that both positive and negative interactions with institutional agents at school were important in helping Chicanas think about the specific types of colleges to which they might apply.

According to Perna (2006), counselors and teachers may transmit necessary college-related social capital to students by providing information about college and assistance with college choice processes such as assistance in filling out application forms and meeting application requirements (A. F. Cabrera & Caffrey, 2001). The findings from this study indicate that most students did not acquire social capital from teachers and counselors during the choice stage. With the exception of writing letters of recommendations for four students and reviewing the college application essays of a student, teachers and counselors did not appear to assist with the application process.

It is likely that it was not that teachers and counselors were unwilling to assist with college choice processes during the application process, but rather that they were unable to assist because the applications for Arizona state universities give teachers a limited role in the application process. All but four students applied only to the three state universities, with the majority of students applying to only ASU (seven) or ASU and NAU (eight). Only three students applied to UA. None of the state universities require that students submit a letter of recommendation (ASU, 2011; NAU, n.d.; UA, n.d.), which are typically supplied by teachers or counselors, and only UA requires a personal

statement (UA, n.d.). Because only three students applied to UA, only a few teachers and counselors may have been approached to provide assistance with a personal statement. Though four other students applied to other universities outside Arizona's state system of universities, teachers' and counselors' assistance would have been limited. In the end only one of these four students needed a letter of recommendation. Likewise, only two students needed to write personal statements.

Enrollment. Student responses indicated that high school staff had more of an influence on their decision to attend ASU. Five students indicated that their counselor influenced them to attend ASU and one student named a coach as an influence. Gloria indicated that a coach influenced her decision to attend ASU.

> One of my track coaches encouraged ASU, but that's because he went there, but he was mostly joking. No, I mean, [teachers] always encouraged NAU, ASU, or UA, but they don't really care which one. *[Laughter]* They just wanted kids to go there, to universities, and do good.

From what Gloria shared, her track coach appeared to subtly encourage her to attend his alma mater. It appears that high school staff at Gloria's high school believed that successfully completing the college choice process meant enrolling in a state university; it did not matter which one the student chose. High school staff conveyed information about all or many institutions, and did not share a preference regarding where the student attended. Additionally, in several instances high school staff were not able to voice preference for one school over another since seven students in this study, including Gloria, only applied to ASU.

Arnold also shared that his counselor encouraged him to attend ASU, but there was no other school for her to encourage because ASU was the only school to which he applied.

> The counselor wanted me to go [to] ASU. Well, she said that I should attend, plan on going on to college somewhere. Because she thought that I was getting good grades . . . she told me maybe I could go to one of the universities like ASU or something. Once I got admitted I don't think I spoke to them, to my teachers a lot once I got admitted. I wasn't like telling, "Oh, I'm going to ASU," a lot.

This example also demonstrates that although his counselor wanted him to go to ASU, his teachers did not encourage him to attend ASU. However, Arnold did not talk "a lot" to his teachers about being admitted to ASU. Arnold's experience reveals the absence of "college talk" between him and his teachers, a critical component of a school with a college culture (McClafferty et al., 2002). McClafferty et al. argue that college talk is essential to developing clear college expectations for students. These expectations are especially important for students like Arnold who come from families with limited college knowledge (McClafferty et al., 2002). Arnold's limited advising experience highlights the need for schools to create an environment in which teachers keep track of, show interest in, and offer advice about postsecondary options.

In sum, family and peers were mentioned more often than teachers and counselors as having influenced where students applied to and enrolled. Also, older siblings were considered more influential than parents in determining where the participants applied and enrolled. Among participants, a majority reported being motivated to apply to and attend ASU as a result of having a sibling who had attended or was attending ASU. Following an older brother or sister to college suggests that older siblings are transmitters of necessary college-related social capital in that they played a role in defining ASU as an appropriate and reasonable option for participants.

Peers were mentioned about as often as siblings as influencing students' decisions to apply and enroll in a particular college or university. This finding was not surprising

given research that showed that when peers transmit the necessary social capital for college enrollment, students are more likely to plan to attend and enroll in college and acquire information about college (Perna, 2006). Similarly, for students in this study, having friends who planned to apply and enroll in a particular institution influenced students' application and enrollment decisions.

The majority of teachers and counselors did not transmit necessary college-related social capital to students during the application process in that they were not sources of assistance with filling out application forms or meeting application requirements. A lack of social capital transmission by teachers and counselors may have been a result of state university application processes and student application behaviors that generally did not require teacher or counselor input. Teachers and counselors, however, had more influence on college enrollment decisions.

Additional Influential Factors on the College Choice Process

The previous sections outlined some of the academic, social, and familial factors that influenced the college choice process of the Mexican American first-generation college students in this study. During student interviews, however, all students referenced additional factors that influenced their college choice process. This section presents additional influences that were frequently indicated by students, with a particular focus on those factors that were mentioned more often than family, peers, teachers, or counselors.

Predisposition

Participants' decision to go to college was influenced by a number of important individuals, most notably by parents and siblings. Peers had some influence, while

teachers and counselors did not influence the participants' college choice process. Nine students mentioned additional factors that influenced their decision to attend college. Additional reasons that students indicated contributed to their decision to go to college can be loosely grouped under two categories, internal and external motivators.

Motivation has been defined as "that which moves people to act" (Ryan, Lynch, Vansteenkiste, & Deci, 2011, p. 197). Higher education literature has emphasized the importance of motivation in succeeding in school (N. L. Cabrera & Padilla, 2004; Russell & Atwater, 2005), attending college (Côté & Levine, 1997; Rooney, 2008) and persistence (Russell & Atwater, 2005). For the purposes of this study, internal motivation was defined as a desire to go to college that was motivated from within. Conversely the motivation to go to college was defined as external if the motivation came from outside the participant.

Students were internally motivated to go to college by such things as the drive for academic achievement (one student), not wanting to reinforce a negative stereotype (one student), and to learn as much as possible (one student). External motivators included career goals (two students), college attendance being viewed as the norm (two students), and participation in a pre-college program (one student). Some of these internal and external motivators are presented below but they will not be discussed in-depth because they were not mentioned more often than family members, peers, teachers, or counselors as having influenced the decision to go to college.

Internal Motivators. For four students, the motivation to go to college came from within them. Nicole attributed her desire to go to college to her drive for academic achievement. Nicole offered many examples of her K-12 academic achievements that

were a result of a focus "on being the top student." Nicole shared that the ultimate goal

for a top student was to go to college. She shared, "[Going to college] was just kind of

always me being the top student. That's kind of what my goal was [college]."

Edwin's internal motivator for going to college was that he did not want to

reinforce a negative stereotype. Edwin grew up in south central Los Angeles and

growing up in the "rough neighborhood" left a lasting impression on him. He indicated

that he was grateful that his mother had moved them to Arizona before he began junior

high school. Edwin shared, "In high school I saw how my friends turned out in

California. That made me . . . appreciate the fact that I got out of there as soon as I

could." Edwin offered examples of how some of his friends "turned out" when he

commented on how he wanted to go to college because he did not want to reinforce a

negative stereotype.

> I didn't want to fall into gangs . . . I still have this constant today. I still say it. I
> don't want to be a statistic. . . . so I thrive to gain an education and higher myself.
> I've always been ahead of my class, especially [in Los Angeles]. . . . I was always
> looking to learn more. . . . I did not want to end up like what all people used to
> think about the youth from my neighborhood, in gangs, a drug dealer, and a high
> school dropout. I did not want to be a statistic in the data for the high school
> dropout rate, or for kids in gangs, or part of the death toll.

For Edwin, not wanting to reinforce a negative stereotype about the youth from his Los

Angeles neighborhood was a critical source of motivation to attend college.

External Motivators. Five participants attributed the motivation to go to college

to something outside of them. First, consistent with previous research that reported that

career goals are one of the reasons that students attend college (Ceja, 2001; Phinney,

Dennis, & Osorio, 2006), findings from this study demonstrate that two students were

influenced to go to college based on their career aspirations. For Alex and Genesis,

knowing that they needed to go to college to achieve their career goals was a motivation to attend college. Alex stated, "I didn't really want to go to college, it's just a job that's associated with college. I wanted to be- when I was little, almost in junior high- I wanted to be a lawyer." Genesis also confirmed an understanding between her career goals and needing to obtain a college education.

> I just kind of took it as a given, like that's what you should do [go to college] if you want to be a teacher, if you want to be a doctor, if you wanted [to] have one of the good paying jobs.

Both Alex and Genesis, children of blue-collar parents, saw a college degree as an essential element to achieving a specific white-collar occupation. For them, college was the required next step after high school for attaining a good job.

Students were also influenced to pursue postsecondary education because they considered college attendance to be the norm. When the participants were younger, they thought that everyone went to college. Evelyn and Patrick recalled experiences that led them to believe that after high school, college attendance was "simply the next, logical, expected, and desired stage" (Terenzini et al., 1994, p. 62). Evelyn explained that when she was young, she thought that schooling was something people participated in throughout their lives.

> I would say it'd be in elementary school [when I knew I wanted to or had to go to college]. I never really thought about actually going to college, because it was just something that . . . I remember my high school being a street down from my elementary. I was like, "Oh! I'm going to go there when I go to high school, and then from there, I don't know where I'm going to go. I'd have to go to another school or something."

Similarly, when Patrick was young he thought everyone went to college because he constantly heard people around him talking about college, which made him aware of college attendance.

Everybody [was telling me to go to college since I was a little kid]. . . . teachers were talking about going to college, television was talking about going. I just figured everyone goes to college. . . . I thought college was something everyone went- had to do.

The idea of going to college was introduced to Evelyn and Patrick at an early age. Although they did not know where they would go for postsecondary education or the requirements for getting into college, they knew before they entered junior high school that college was an option.

Search

As noted earlier, most students were able to access important information about college and receive assistance with college processes from multiple resources, including immediate family members, peers, teachers, and counselors. Consequently, since most students had a transmitter of social capital available to them in their academic, social, and familial settings, they may not have felt compelled to seek out additional sources of social capital, such as community members (Admon, 2006) or extended family members (P. A. Pérez, 2007; Sanchez et al., 2006). However, some students engaged in activities that also provided them with information about college or help with search stage processes. These activities – campus visits, pre-college/outreach programs, and the Internet - are presented below but they will not be discussed in-depth because they were not mentioned more often than family members, peers, teachers, or counselors as having influenced the search stage.

Campus visits provided seven students with information about college. These visits took many forms, which included formal tours organized by pre-college/outreach programs and time spent with a sibling who was attending the college. Arnold and Kulele, for example, went on a formal campus visit with their older siblings when their

siblings were exploring college options. Erika, on the other hand, did not participate in a formal campus visit, but she visited her brother at ASU on several occasions.

Another factor that provided information and assistance to students involved participation in a pre-college/outreach program. Five students participated in a pre-college program that provided college-related information and assistance with the college choice process. Some students, like Cassie, who participated in a university-based outreach program, credited the outreach program with teaching them the most about college.

Lastly, three students cited the Internet as being an important source of college information. Participants sought out information independently about colleges by consulting websites for information on possible institutions. Students found that the Internet was a quick and easy way for them to obtain information about many different colleges and universities.

Choice

When it came to academic, social, and familial factors, participants' decisions on where to apply and enroll were influenced most often by peers, siblings, and counselors. Parents and teachers had little influence on the participants' decisions on where to apply and subsequently enroll. Most (14) students mentioned additional factors that influenced their decision on where to apply and all students provided additional reasons for choosing ASU for enrollment.

Application and Enrollment. All students who considered staying close to home an important influence on their application and/or enrollment decisions expressed a desire to stay close to their family. Furthermore, they made references to family

members who supported their college attendance, but wanted them to go to school close to home. In short, the desire to be close to home when attending college, along with family preferences, affected participants' application (López Turley, 2006) and enrollment behaviors. Because of the interconnectedness of the reasons, the influence of staying close to home on application and enrollment decisions will be discussed together.

When students applied to colleges, distance from home was a consideration for 10 students, indicating that distance from home has a greater influence on where students applied than family (eight students), peers (seven students), and teachers and counselors (two students each). Moreover, with twelve students choosing to enroll in ASU primarily because it was close to home, students cited being close to home more often than any other reason for choosing to enroll at ASU. Hence, staying close to home played an important role for students in this study both during the search stage, as it influenced the institutions that parents encouraged and discouraged, and during the choice stage.

For six students in this study, staying close to home was an important consideration when applying to a college because they could not imagine going away to college. Arnold, for example, only applied to ASU because he wanted to attend a university that would allow him to continue to live at home.

> I applied to ASU and got in there and then yeah, that was the only one that I applied to. . . . The other universities, they were farther, I don't know. I wouldn't see myself going to a– off [to] live over there.

Other students explained that their reason for wanting to go to school close to home was that they wanted to stay close to their family. Cassie wanted to go to college near her home: "I wasn't ever really a rebellious teenager. I didn't want to leave - get away from my parents. That's why I really only applied to universities in Arizona."

All students did not define "staying close to home" in the same way. Whereas both Arnold and Cassie indicated that they wanted to stay close to their families, Arnold defined staying close to home as going to a college or university that would allow him to continue to live at home, while Cassie viewed staying close to home as staying in the state of Arizona. As a result, Arnold applied only to ASU since it was located just 13 miles from his home while Cassie applied to ASU, which is located 40 miles from her home, and NAU, located 145 miles away. Later, when Cassie chose to attend ASU, she indicated that although she preferred living in university housing, she also liked being able to go home almost every weekend to celebrate events such as birthdays and holidays with her family.

Other students considered attending schools further away from their homes but chose ASU because while their family was supportive of their college attendance, they also wanted them to choose a college that was close to home. This finding reflects the research suggesting parental expectations have a significant impact on college-related outcomes (Arbona & Nora, 2007; López Turley, 2006; Swail et al., 2005c). Kulele, who lived in Phoenix and in university housing, explained that both her mother and brother urged her to stay close to home. First she described her mother's reaction to her interest in attending NAU.

> My mom's like, "It's three hours away. There's no way." I can't do that. It's like, "I don't know what to do." My mom keeps telling me go to ASU. "That's where your brother went" instead of going to Flagstaff.

Upon further reflection, she later recalled that her brother urged her to attend ASU in part because it was close to home. She recalled, "He also said basically that it was close to home. That was always a big thing for everyone apparently."

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Victor's family also made it clear to him that they did not want him to go too far away from home. In explaining his top reasons for choosing ASU, he shared, "It's closer to home and to my family and everything, because they don't want me to leave too far off." Unlike Kulele's family, however, three hours was not too far away. Victor, who lived in campus housing, was from a town three hours from Phoenix.

According to Hossler and Gallagher's (1987) model, "during the choice stage, students compare the academic and social attributes of each college they have applied to and seek the best value with the greatest benefits." However, being close to home was the number one reason for choosing ASU for half of the students that indicated that they chose to attend ASU in part because it was close to home. Moreover, of Arnold, Cassie, Kulele, and Victor, only Cassie and Arnold made reference to considering ASU's academic and social characteristics. Furthermore, only half of the students who selected ASU for enrollment in part because it was close to home also indicated that ASU's academic and social characteristics were important reasons for selecting ASU. For participants, the academic and social attributes of ASU were not an important consideration.

Latina/o preferences for staying close to home while attending college is a finding that has emerged in other Latina/o college choice studies (Admon, 2006; Carreras, 1998; Ceja, 2001). Admon (2006) suggested that the preference for staying close to home among Latina/o students may be culturally-based. Admon argued that Latina/os are more attached to their homes and families than White and African American students, and as a result are more likely to apply to and attend a local college. In a study that examined the effects of institutional attributes on application likelihood ratings, Carreras (1998)

reported that Latina/o participants were more likely to apply to institutions that were closer to home than to those further away. In addition, López Turley (2006), in a study that found that parents' preferences have a significant influence on their children's college application patterns, provided evidence that parents who feel it is important for their children to attend school while living at home are more likely to be Latina/o.

Researchers and practitioners continue to debate whether Latina/o preferences for applying to a college close to home is beneficial or a hindrance. Along both lines of the debate they consider whether students want to stay home or are being forced to stay home by their families (Admon, 2006; Carreras, 1998; Ceja, 2001; P. A. Pérez, 2007; Rooney, 2008). Participants, such as Arnold, Cassie and Genesis, consistently reported that they chose to stay home because they preferred to stay close to their families. Some students shared that they wanted to stay close to home because they wanted to help their families. Genesis indicated that she wanted to help her mother. Specifically, she indicated that she wanted to help her mother with her younger siblings: "I . . . want to stay in Arizona so I can go back to my house and help my mom out and stay close to them and help with the kids, too." Genesis talked about staying in the state of Arizona, yet she decided against applying to NAU because she considered the two and a half hour drive from her home too far away for her to be able to come home at any time.

The availability of public, four-year universities for students who want to stay close to home is cause for concern. The concern centers on the adequacy of three state universities for meeting the needs of Mexican American first-generation students. Arizona has just three public, four-year universities, ASU, NAU, and UA. NAU, located in northern Arizona, is located 160 miles (or a 2 ½ hour drive) from ASU, which is

located in central Arizona. UA, located in southern Arizona, is located 115 miles (or a 2 hour drive) south of ASU. Are students who live in the Phoenix metropolitan area simply choosing ASU because it's the only public, four-year university closest to their home? Moreover, is Arizona limiting students' choices by not giving them a variety of university options? It is important to note than in addition to only having three state universities to choose from, there are only four additional four-year, non-profit institutions in all of Arizona that award only bachelor's and higher degrees (ED, IES, & NCES, n.d.). In other words, these four institutions, like the state universities, do not offer associate degrees.

While six students wanted to go to an institution close to their home and never considered attending an out-of-state college or university, four students were interested in attending out-of-state schools because they wanted to experience living away from their families and Arizona.   Gloria recalled, "I really wanted to go out-of-state for the experience." She hinted at the experience she thought she would get out-of-state when she later remarked, "Being in state . . . even though I'm so close to home, college is a complete different world. It's awesome. I love it."   Living on campus, only 40 minutes from her parents' home, allowed Gloria to experience living away from her family. Despite Gloria not ending up going to school out of state, it seems that she was still able to get some of the experience she was looking for by attending college outside of Arizona from living in university housing.

In contrast to previous research (Admon, 2006; Carreras, 1998; Ceja, 2001) eight of the 17 participants did consider applying or attending an out-of-state institution. Three students followed up on this interest and applied to at least one out-of-state institution.

The finding that any of the participants applied to out-of-state institutions was unexpected given previous research indicating that Latina/os are reluctant to apply to schools that are far away from home (Admon, 2006; Carreras, 1998; Ceja, 2001; López Turley, 2006; P. A. Pérez, 2007). However, the vast majority of the participants (five) did not follow through on their initial interest. For most of the students applying to institutions out of the state was not affordable. The results showed that not applying to an out-of-state institution was related to cost and parental preferences rather than to reasons related to attachment to their homes and families (Admon, 2006).

Application. After distance from home, the factors that students cited most frequently for choosing which schools to apply to were the following: institutional type, campus setting, simple application process, and familiarity with the school. Ten students referenced institutional type as influencing where they applied. These students frequently described being averse to applying to a community college and communicated the perceived disadvantages of enrolling in a community college. Cassie and Michelle recalled being unwilling to apply to a community college because of their older siblings' experiences:

> After seeing [my sister] not finish, and seeing my other sibling who did get her Associate's (it took her maybe 3, or 3 ½ years), I knew that I wanted to go straight to a university because I didn't want to go and get stuck there. That really had me dead set on, "I'm going to a university. I can't stay here and get stuck." That is mostly why I decided to go straight to university. (Cassie)

> Going to community college wasn't an option either because our older siblings had gone too, but they didn't graduate at all. They took maybe a few courses. (Michelle)

Having siblings who attended a community college provided students with information about this type of schools. While a few students spoke favorably about community

colleges and applied to a community college, the negative experiences that their siblings

tended to describe at a community college generally discouraged students from applying

to a community college. Four students were discouraged not just by their siblings'

negative experiences, but also by their older siblings. When asked how her siblings

helped her obtain information about college, Victoria explained that she learned about

community college through her sister.

> I know my sister, she would always tell me to go to college. She wanted me to go
> to ASU 'because she said that she felt that community college was too easy.
> She's like, "I swear this stuff is going back to high school again." She's like, "It's
> so easy." She's like, "If you want to be more challenged you should go to
> university."

Participants had concerns about the perceived lack of academic rigor in

community college classrooms. Students wanted to go to an institution of higher

education where the coursework would be demanding and where they could demonstrate

that they could do college-level work. Kulele, for example, inferred that community

college classes were easier than university classes, and that this explained why she should

not attend a community college.

> I [did not] want to go to community college because to me [it's] like they dumb it
> down. I haven't actually taken community classes, but to me I feel like people are
> always saying it's easier. I don't want to dumb it down. I want to know that I can
> do [college] the way that I'm supposed to be able to do [college].

Despite research indicating that much of the growth in college enrollment among

Latina/os has been at community colleges (Fry, 2012), most of the students in this study

were not open to attending a community college. Four participants were discouraged

from attending a community college by their siblings; others were discouraged to do so

by their parents, peers, teachers, or counselors. Cindy, for example, was told by a teacher

that her transition to college would be easier if she started at a university rather than

beginning at a community college and then transferring to a university two years later.

Based on her teacher's advice, Cindy concluded that "if you go straight to a university . .

. you get used to [college] faster. If you go to a [community college,] [the university]

will be a huge difference." Cassie concluded that she should not apply to community

college because her friends were not applying to community colleges. In spite of her

friends having never explicitly discouraged her from applying to a community college,

she decided:

> It would've been weird if I went to a community college 'because I was just as smart as all of [my friends] were. It was almost like that was the thing to do. In our group of friends that's what you did. You went to university.

Although most participants indicated that the majority of their peers had chosen to attend

a community college after high school, participants were discouraged by important

persons in their lives to pursue this postsecondary option. In addition, they had access to

information about community college from people they knew who had attended a

community college. The information students learned about community college led them

to prefer universities over community colleges.

McDonough (1997) proposed that "a student's *cultural capital* will affect the

level and quality of education that a student intends to acquire" (p. 8). Furthermore,

DiMaggio (1982) found that cultural capital may affect the quality of the college a

student chooses to attend. However, traditional notions of cultural capital would have

predicted that the participants would not aspire to attend a university because either they

would have had lower educational aspirations or they would not have known about the

benefits of attending a university compared to a community college (Jun & Colyar, 2002;

McDonough, 1997). In this study it is clear that the students had social networks that

allowed them to acquire the cultural capital necessary to aspire to attend a university. Mariela, for example, accessed cultural capital through her counselor, who was also the director of the college preparation program in which she participated in high school. Mariela shared, "She would never take us to [*Community College*]. She'd be like, "That's your back-up plan. If all else fails, that's your back-up plan." That's what she told everyone." By transmitting the message that attending a community college was not as good as attending a university, Mariela's counselor instilled in her a form of cultural capital that middle and upper class students tend to receive through their families and neighborhood (Tierney, 1999). Like Mariela, had Cassie, another low income student, not accessed the required cultural capital through her counselor, she may have lowered her educational expectations (Jun & Colyar, 2002) and opted to attend a community college.

In addition to institutional type, students most often cited campus setting (four participants), simple application process (six participants) and familiarity with the school (five participants) as additional factors influencing where they applied. For four students, campus setting was important. Campus setting refers to where the campus was located, rather than distance from home. Evelyn, for example, decided to apply to NAU in part because she thought the campus, which is located in a mountain town and surrounded by pines, was "pretty." On the other hand, she decided not to apply to UA, whose campus is located in a desert town, because she thought being at UA would be like "being in the middle of nowhere."

Six students were encouraged or deterred from applying to a school because of the school's application process. Students admitted that they were not going to apply to a

college if the application was not "easy." Gloria, for instance, talked about the out-of-state applications that she began but never completed. She was practical in her approach to completing college applications. She did not see the purpose of investing money and time in an application if she had no real commitment to attending the institution if she was admitted.

> I started applying to a few but there was [an] essay and it I wasn't fully committed. It was like, "What's the point of paying for the fee to apply and writing the essay and getting letters?"

Even Mariela, who applied to many more schools than any other student in this study, did so in part because she strategized and applied to schools that required the least amount of effort on her part. She explained her process for selecting which schools to apply.

> I was like, "I'll do the Common Application and see who has a Common Application, and then I'll take it from there." I did a lot of the Common Apps. Then, the ones that required the separate apps, those were the ones that I kind of maneuvered them around. I was like, "Which one has less work?"

Mariela references using the Common Application for Undergraduate Admissions, which is intended to simplify the college admission process by allowing students to fill out one application and submit it to over 450 higher education institutions (The Common Application, 2011). A review of public documents designed to inform students who are considering using the Common Application indicated that some schools require additional writing samples to complete an application. It appears that these additional writing samples deterred Mariela from completing those schools' application processes.

Finally, familiarity with an institution was also relevant for five students. Students thought about applying or applied to schools that they had some familiarity with, in terms of name recognition. Mariela made decisions on where to apply based on the school's application process, but she also considered schools because she knew they

were top engineering and/or Ivy League schools. However, if she learned about an institution with which she was not familiar, she sometimes took the time to look up the school and "make sure it was an okay school."

Enrollment. In addition to distance from home, students also cited the following factors as an influence on their enrollment decision: cost and financial aid, academic program and admission. Cost and financial aid were closely linked for most students. Nine students chose ASU because their financial aid awards allowed them to be able to afford the cost of ASU attendance. Mariela and Patrick described how being able to afford ASU was essential to their attendance at ASU and critical to their capability to achieve access to a university. Mariela said that during the application process, "ASU was my last resort." She explained why, despite her reluctance, she was forced to enroll at ASU.

> Technically, I wasn't going to come to ASU. *[Laughter]* I had everything . . . ready to go to University of the Pacific in California. . . . I just had to pay my enrollment fee. But . . . my dad got laid off. . . . I told my dad . . . I really want to go to University of the Pacific. . . . but when it came down to paying the $700 [enrollment fee], my dad was like, "I don't have those, and I'm not taking it out of the savings, 'cause we need those." I was like, "*[Sigh]*." So, it broke my heart, and I was, "Fine," like, "I'll go to ASU." *[Laughter]* With my teeth like, "Argh!" I was really mad, but I had to do what I had to do.

When he was applying to schools, Patrick also decided that he was not going to go to ASU. It was during the financial aid awards process that he realized that he could not afford to attend the out-of-state schools to which he had applied. Patrick explained that once he became aware that he was not going to be awarded sufficient financial aid at his first and second choice schools, he applied to UA and ASU. He quickly decided he did not want to go to UA because of its location ("There's nothing in Tucson."), which left ASU as his only option.

I got accepted but it was just paying for it was the thing so ASU – I wasn't going to be able to come to ASU if I wasn't going to be able to pay for it but when I found out I got that [President Barack Obama Scholars Program] scholarship I was like, I guess I'm coming here.

Patrick's application behaviors exhibited a lack of sophistication and thoroughness characteristic of low-SES college applicants (A. F. Cabrera & La Nasa, 2000a). In general, more affluent students with parents that have experienced the college choice process have the relevant cultural capital to know that they should apply to their safety schools along with their top choice schools.

Both Mariela's and Patrick's enrollment decisions were shaped by issues related to cost and financial aid. Specifically, Mariela's and Patrick's recollection that cost and financial aid were the most important factors in deciding their choice of ASU aligns with previous research that has found that issues related to cost and financial aid can limit and determine students' institutional options (Kinzie et al., 2004; Mendez, 2003; L. X. Pérez, 1999). Institutional options are limited to those colleges that the student can afford, and not necessarily the one they wish to attend. In their report chronicling the reasons for the changes in the college choice process from the 1940s to the 1990s, Kinzie, et al. (2004) concluded:

Although some students have the means and the resources to conduct expansive search and choice processes, many lack the . . . financial means to consider a range of college destinations. It's easy to see how students in this latter group might well feel that many of the decisions that constitute the college choice process are simply not available to them; that their options are sadly and unfairly limited. (p. 48)

Mariela's statement that she "was really mad, but I had to do what I had to do" points to a student whose options were "sadly and unfairly limited" (Kinzie et al., 2004, p. 48).

The research examining the effects of cost and financial aid on the Latina/o college choice process indicates that a low cost of attendance and generous financial aid makes a college more accessible and attractive to Latina/os and consequently can influence Latina/o application decisions (Bhagat, 2004; Rooney, 2008). Furthermore, Ceja (2001) found that Chicanas consider cost even before they are making decisions about which school to attend. However, for most students in this study, cost did not emerge as an influence during the predisposition or search stages, or even during the application process. Like Mariela and Patrick, students generally did not seriously consider cost of attendance until they were deciding where they were going to enroll.

In addition to distance from home and cost and financial aid, students most often cited academic program and admission as additional factors influencing their decision to enroll at ASU. Six students chose ASU for reasons related to an academic program. The term "academic program" refers to reasons related to perceived quality of the chosen academic program and availability of the preferred major. Among the students that considered the quality of an academic program, their considerations included being admitted to ASU's Honors College, engineering school, or business school, and believing that ASU had a better academic program than another school they were considering.

Based on a review of public documents (Merriam, 2009), it can be concluded that students were right to be motivated to attend ASU by the quality of ASU's academic programs. The Honor's College was featured in the book *Higher Education?: How Colleges Are Wasting Our Money and Failing Our Kids---and What We Can Do About It*

as an exemplary program that "offers . . . undergraduates the intimacy of a liberal arts college, at state school prices" (Hacker & Dreifus, 2010, p. 227). ASU's Ira A. Fulton Schools of Engineering were ranked #43 (out of 144 ranked schools) (U.S. News & World Report, 2012c) on U.S. News and World Report's 2011 list of *Best Engineering Schools*. In 2011, U.S. News and World Report ranked the W. P. Carey School of Business 30 out of 101 *Best Business Schools (*U.S. News & World Report, 2012d).

Evelyn, who was admitted to ASU's Honors College, talked about why she chose ASU over NAU.

> I also wanted to go [to NAU] because my chemistry teacher had told me it was the better school to go to if I wanted to get a better catch on to what I wanted to do. Which is chemistry. NAU actually gave me more money than ASU but I stuck to ASU once I found out I had been accepted to the Barrett's honors program. Which is the only good thing I did for myself senior year apart from applying for college.

For Evelyn, the prestige of being accepted to the Honors College was more important than a larger financial aid package. Prestige may have been important to her because her older sister was attending a selective, private university in Washington, D.C. Evelyn did not apply to any selective schools because she was afraid that she would not be admitted. It is likely that by enrolling in ASU's Honors College, she would give her parents, in her words, "more to brag about." Not being a failure and making her parents proud were very important to Evelyn.

Other students choose ASU because of the availability of their major. Gloria, who had done research on film programs at out-of-state schools decided to attend ASU in part because she would be able to major in film at ASU.

> After going through [the ASU campus visit] - I didn't look too much into [other schools]. After I decided I was going into ASU and they had a [film] major. I was like, "All right. Let's hope it's as good as California."

Finally, three students selected ASU in part simply because they had been accepted. In fact, these students reported that they only applied to ASU because they assumed they would be accepted. For example, when Alex was explaining why he chose to enroll at ASU, he concluded, "I chose this school because they accepted me pretty much. I was like, 'Hey, I'll go.' My parents were all for it. I mean, they supported my brother [when he chose ASU]."

Summary of Findings

This section highlights key findings from this study, including academic, social, and familial factors, and additional influences on students' college choice process. As transmitters of social capital, parents, older siblings with college experience, peers, teachers, and counselors allowed students to gain access to information about college and assistance with college processes. The primary function of social capital is to enable individuals to gain access to cultural capital, which includes gaining access to cultural knowledge and values about higher education (Perna, 2006). Older siblings, teachers, and counselors provided the most information about college to the students in this study and provided assistance with college processes. Therefore, siblings, teachers, and counselors transmitted cultural capital by informing students about the process for securing a college education (McDonough, 1997). Students' cultural knowledge – knowledge of how the college choice process works (Perna, 2006), was enhanced as a result of having access to individuals (e.g., siblings, teachers, counselors) who had college experience.

Parents and peers also played an influential role in students' college choice process. During the predisposition stage, the students' parents were the most influential

factor. Students' aspirations were shaped by their parents' values about higher education. The participants said that their parents valued postsecondary education as a means of ensuring economic security. Therefore, parents transmitted cultural capital by informing their children about the value of securing a college education (McDonough, 1997). Peers also emerged in this study as transmitters of social capital. Peers transmitted social capital by planning to enroll in college, having high educational expectations and providing information about college to participants (Perna, 2006).

In addition to the influence of important others - family, peers, teachers, and counselors – students referenced additional factors that influenced their college choice process. Some factors – distance from home, institutional type, and cost and financial aid - were cited more often than family, peers, teachers, or counselors. When students applied to colleges, distance from home was a consideration for most (10) students. Moreover, with twelve students choosing to enroll at ASU in part because it was close to home, this was the most influential factor on participants' decision to enroll at ASU. All students who considered staying close to home an important influence on their application and/or enrollment decisions expressed a desire to stay close to their family and also made references to family members who supported their college attendance, but wanted them to go to school close to home. Ten students referenced institutional type as influencing where they applied. The students frequently described being averse to applying to a community college and communicated the perceived disadvantages of enrolling in a community college. Cost and financial aid were closely linked for most students. Nine students chose ASU because their financial aid awards allowed them to be able to afford the cost of ASU attendance. The next chapter provides a brief overview of

the study, a summary and discussion of the research findings, and a discussion of the implications of the results for theory, policy, practice, and research.

Chapter 6: Summary and Conclusions

The purpose of this study was to understand the factors that influence the college choice process of Mexican American first-generation college students who have an older sibling with college experience. The major research question and sub-question guiding this study were:

1. How do Mexican American first-generation students who have an older sibling with college experience describe their college choice process?

   a. What are some of the familial, social, and academic factors that Mexican American students identify as influences on their college choice process?

Whereas the previous chapter presented a discussion of the findings, this chapter is primarily devoted to presenting a summary of these findings along with a discussion of the research findings in context of the literature on college choice. Included in this discussion is the presentation of the implications of the results for theory, policy, practice, and research. I begin by providing a summary of the major findings regarding the influence of family, peers, teachers, counselors, and other factors on the predisposition, search, and choice stages of the college choice process. The next section discusses the relevance of these findings' implications for theory, policy, and practice. The next two sections provide recommendations for future research and a discussion of the study's limitations. The chapter ends with concluding thoughts pertaining to the college choice process of Mexican American first-generation college students who have an older sibling with college experience and a personal reflection.

Overview of the Study

ELS:2002 revealed that 91% of Latina/os indicated that they planned to continue their education after high school (Chen et al., 2010, Table 3). However, the college enrollment rate for Latina/os (60%) (U.S. Bureau of Labor Statistics, 2011) suggests that simply aspiring to attend and graduate from college is insufficient to guarantee college attendance. This inconsistency between Latina/os' postsecondary plans and their actual behavior upon graduation from high school (Swail et al., 2005b) illustrates the need for further research to help us understand the factors that influence their postsecondary plans and behaviors.

While a considerable amount of research exists on factors influencing the college choice process of first-generation college students, and a few studies report on the process for Mexican American first-generation college students specifically, far less attention has been devoted to the college choice process of first-generation college students who come from families where an older sibling has already experienced the college choice process. Mexican American first-generation college students who are not the first in their family to attend college represent a select subgroup of students whose first-hand knowledge of college attendance via an older sibling places them in a different group than first-generation students who come from families where there is no history of college attendance.

This study was based on a qualitative, descriptive, multiple case study design. A primary strength of the descriptive case study method is its ability to generate a rich, in-depth and detailed account of a case that conveys understanding and explanation of a phenomenon (Merriam, 1998). The cases in this study were 17 Mexican American first-

generation students attending ASU. Students completed a questionnaire and participated in two individual interviews. Five students had an older sibling with a bachelor's degree (all but one from ASU); three students had an older sibling with an associate degree; eight students had an older sibling enrolled at a university (all but one at ASU); and one student had an older sibling who had completed some coursework at ASU but left before obtaining a degree. In addition to all having a sibling with college experience, participants were all first-time freshmen, Arizona residents, spring 2010 high school graduates, and enrolled at ASU in fall 2010 with continued enrollment in spring 2011.

This study incorporated elements from two college choice models, Hossler and Gallagher's (1987) three phase model of college choice along with Perna's (2006) proposed conceptual model of college choice. Hossler and Gallagher's model has framed much of the college choice research and is useful as it simplifies the presentation of the college choice process into three stages, predisposition, search, and choice *(*Hossler, et al., 1999). However, researchers have suggested that the Hossler and Gallagher model is insufficient for explaining the college choice process of different income, SES, and racial/ethnic groups (Bergerson, 2009b; Perna, 2006; Talavera-Bustillos, 1998). The addition of Perna's model addresses some of Hossler and Gallagher's shortcomings. Perna's model recognizes differences across students in the resources that shape their college choice process. The model assumes that a student's college choice process is shaped by his or her habitus, as well as the school and community context, the higher education context, and the social, economic, and policy context (Perna, 2006). Although this model is more comprehensive than the Hossler and Gallagher model, only those variables identified in the literature as relevant to the Mexican American college choice

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process were used to guide the analysis of participants' college choice process and to assist in interpretation of the findings. Four conclusions were made on the basis of the review of the literature: (1) parents are a key factor; (2) older siblings appear to have a role; (3) peers are influential; and (4) schools do not appear to play a role. Perna addresses these familial, social, and academic factors in the following key variables of her model: cultural capital, social capital, and the school context. Hence, guided by the literature, only these three key variables were selected as appropriate for this study.

Summary of Findings

The overall findings presented in the previous chapter indicate that as transmitters of social capital, parents, older siblings with college experience, peers, teachers, and counselors allowed students to gain access to information about college and assistance with college processes. The primary function of social capital is to enable individuals to gain access to cultural capital, which includes gaining access to cultural knowledge and values about higher education (Perna, 2006). I found that Mexican American first-generation students rely on social networks to help them with their college choice process. In particular, siblings, teachers, and counselors provided the most information about college and assistance with search stage processes to the students in this study. In other words, siblings, teachers, and counselors transmitted cultural capital by informing students about the process for securing a college education (McDonough, 1997). Students' cultural knowledge – knowledge of how the college choice process works (Perna, 2006) - was enhanced as a result of having access to individuals (e.g., siblings, teachers, counselors) who had college experience.

In addition to this finding, I also found that previous college experience was not necessary for an individual to influence the participants' college choice process. Parents and peers also played an influential role in students' college choice process. During the predisposition stage students' parents were the most influential factor. Mexican-American first-generation college students' aspirations were shaped by their parents' values and perspectives about higher education. The participants' assessment of their parents' values suggested that their parents highly valued postsecondary education as a means of ensuring economic security. To that end, this finding supports a common finding in the college choice literature that parents transmit cultural capital by informing participants about the value of securing a college education (McDonough, 1997). Although these parents had not personally experienced college, they informed participants about the high value they placed on higher education and encouraged them to enroll in college. College-going peers also emerged in this study as transmitters of cultural capital. Peers transmitted cultural capital by advising participants as to how to plan for enrolling in college, having high educational expectations, and providing information about college to participants.

In addition to parents, siblings, peers, and teachers and counselors, all students referenced additional factors that influenced their college choice process. Several common themes were identified as additional relevant factors on students' college choice process. A few students decided to go to college because of their career goals and because experiences that they had at an early age led them to believe that they were going to go to college. Several participants pointed to their involvement with campus visits, pre-college/outreach programs, and the Internet as sources of information during the

college search phase. Participants considered distance from home, institutional type,

campus setting, difficulty or complexity of the application process, and familiarity with

the institution when deciding where to apply. Staying close to home, college costs,

financial aid, academic program, and admission were some of the additional reasons that

students chose to enroll at ASU. Of these additional factors, institutional type, staying

close to home, college costs, and financial aid were mentioned more often than family,

peers, teachers, or counselors as important during the choice stages.

Discussion of Findings

The overall conclusions in this study are supported by previous college choice

literature.   In many cases these finding expand upon what has been written about the

factors affecting the college choice process of Mexican American first-generation college

students. The six most important conclusions from this study regarding the influences on

the college choice process of Mexican American first-generation college students who

have a sibling with college experience were:

1. Parents and older siblings have the greatest influence on the predisposition stage.
2. During the search stage, students sought information and assistance from teachers, followed by older siblings and counselors.
3. The institutions that students considered for application and attendance were heavily influenced by older siblings.
4. An institution's distance from home had a great influence on where students applied and enrolled.
5. Institutional type had a great influence on where students applied.
6. Cost and financial aid had a great impact on students' choice of college.

These conclusions are discussed below. They are organized according to Hossler and

Gallagher's (1987) three phase model of college choice.

Conclusion #1: Parents and Older Siblings have the Greatest Influence on the Predisposition Stage

Most of the students in this study identified their parents or older siblings with college experience as having had an important influence on their decision to go to college. Whereas some participants' decision to go to college was influenced by parents' and siblings' explicit expectations, others indicated that their college choice was influenced by parents' and siblings' implicit encouragement as well. Some participants said that parents and siblings influenced students by expressing explicit, verbal expectations for college attendance. Others believed that their parents' life experiences and siblings' college attendance were sources of motivation for students to continue their education beyond high school.

Parents. Of the two most important family members that influenced participants, parents emerged as the most important factor influencing participants' decision to go to college. Students spoke of how their parents' expectations or encouragement for postsecondary education influenced their decision to go college. These findings echo previous research that has suggested that Latina/o parents who are positive influences on the educational aspirations of their children often influence a student's predisposition to go to college by either expecting their children to go to college (Hamrick & Stage, 2004; Hao & Bonstead-Bruns, 1998) or wanting their children to go to college (Azmitia et al., 1994). Nonetheless, I also found that five participants did not say that a parent was an influence on their decision to go to college. This finding suggests that for these students, parental expectation or encouragement was not an essential factor for the decision to go to college.

Students also noted that future employment and earning opportunities informed their parents' expectation or encouragement for college. Eight of the 17 participants described in detail how their parents' own economic struggles or working conditions were pivotal in their parents' motivation for them to go to college. Participants' experiences substantiate much of the previous research that finds that Latina/o parents' motivations for wanting their children to attend college are driven by reasons related to employment and earnings (Castillo et al., 2010; Ceja, 2004; Valencia & Black, 2002).

Some research shows that a lack of information about the economic benefits of college explains in part the lower enrollment rates for Latina/os (Perna, 2006). Nonetheless, the findings from this study demonstrate that parental expectation and encouragement for college attendance was often rooted in an understanding of the value of education and its expected positive economic outcomes. According to students, their parents understood that a high school diploma was not enough for them to obtain a well-paying job.

Perna (2006) indicated that cultural capital may be manifested in terms of the value placed on college attendance and that this value may be measured by parental encouragement for college enrollment. While Perna makes no mention of class when discussing parental encouragement for college, some researchers have deemed cultural capital property of the upper and middle classes (Bourdieu & Passeron, 1990; Coleman, 1988; McDonough, 1997). However, the findings from this study show that participants, many of whom were working class and low-income, also accessed cultural capital through their parents. What is less clear, however, is how participants' parents themselves accessed the cultural capital to know about the benefits of attending college

even though they themselves were not college-educated. Only a few of the students whose parents demonstrated an understanding of the value of education and how it is expected to pay off indicated that their parents had any direct contact with college-educated individuals in addition to their siblings.

Some research (Kiyama, 2008; Trueba, 2002) suggests that families of low socioeconomic status may have unique means of transmitting cultural capital. Trueba (2002), for example, discussed the mastery of different languages, the ability to cross racial and ethnic boundaries, and a general resiliency associated with the ability to endure hardships and overcome obstacles to explain a new cultural capital that Latina/o immigrants transmit to their children. According to Kiyama, there is a connection between cultural capital and funds of knowledge, or "the historically accumulated and culturally developed bodies of knowledge and skills essential for household or individual functioning and well-being" (Kiyama, 2008, p. 12). Kiyama used cultural capital and funds of knowledge to provide a description of how Mexican American parents realized their own resources, developed the confidence to help their children with the educational process, and tapped into their own experiences in order to help their children succeed. Although the origin of parents' cultural capital is not clear, this study advances the notion that low-income and working-class parents can possess cultural capital that promotes college attendance (Kiyama, 2008; Nora, 2004; Tierney & Hagedorn, 2002). Thus, the origin of this cultural capital requires further research. The works of Trueba and Kiyama offer two considerations for an understanding of how cultural capital might have been accessed by Latina/o parents.

Participants referenced conversations in which their parents saw college as a missed opportunity that they were not able to take advantage of. These conversations generally put forth the idea that college would lead to a better life. During these talks, some parents also shared with participants that they regretted not continuing their own education. These parent-student discussions highlight the role of Latina/o parents as transmitters of social capital during the college choice process (Perna, 2006). Some research has suggested that low college enrollment rates for Latina/os are attributable to possessing less of the types of social capital that are valued in the college enrollment process (González et al., 2003; Perna & Titus, 2005). However, Perna's proposed conceptual model of student college choice suggests that parental involvement, which includes parent-student discussions about college, is a form of social capital that may increase the likelihood of college enrollment. Conversations with parents often translated into motivation to attend college for participants. Often, these parent-student discussions were the driving force behind participants' desire to go to college to prevent economic struggles or because they wanted to take advantage of an educational opportunity not available to their parents.

Older siblings. Although participants did not consider their siblings to be as influential as their parents in their decision to go to college, older siblings with college experience proved to be important during the predisposition stage. The influence of older siblings was often evidenced through older siblings' ability to establish expectations for college attendance for students. Two primary ways that siblings established expectations was through sibling-student conversations or by role modeling college attendance.

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Older sibling expectation, encouragement, and motivation for college attendance were important even for students whose parents also supported college attendance. While parental encouragement and expectation played a critical role in students' decision to go to college, seeing older siblings go to college led students to believe that college attendance was a realistic option. Perna (2006) argues that believing that pursuing postsecondary education is a realistic option is a form of cultural capital that can potentially influence enrollment decisions.

The influential role of older siblings who attended or are attending college has been confirmed in earlier studies. For example, using Hossler and Gallagher's (1987) model and Person and Rosenbaum's (2006) theory of chain enrollment, Kaczynski (2011) sought to explain the influence of older siblings attending college on the college choice process of participants that were White, middle class, and non-first-generation. Kaczynski noted that older siblings reinforced predispositions to attend college that already existed. Whereas Kaczynki's participants were non-first-generation students, the students in this study were first-generation students. Yet, similar to the students in Kaczynski's study, most of the students in this study had parents who expected that they would attend college and siblings who reinforced predispositions that already existed. Hence, the ability of older siblings to reinforce the predisposition to attend college was also demonstrated in a Mexican American, first-generation, and primarily low-income population.

The ability of older siblings to reinforce the predisposition for college attendance is particularly important for first-generation college students. Some research suggests that encouraging first-generation students to aspire to a college degree has the potential to

increase enrollment rates for this population (Choy et al., 2000). Research has shown

that in the predisposition stage of the college choice process, parental encouragement and

support have the greatest influence on the development of college plans and aspirations

for all students (Hossler et al., 1999) and among low-SES 8th graders as well (A. F.

Cabrera & La Nasa, 2001). Nonetheless, results from this study suggest that in the

predisposition stage, Mexican-American first-generation students not only benefited from

parental encouragement as expected but also benefitted from receiving encouragement

and support from older siblings with college experience. Specifically, 14 of the 17

participants were able to garner information they needed to make the decision to go to

college from their older siblings - by listening to what they said and observing what they

did. It is possible that the older siblings with college experience can enable students to

gain access to a form of cultural capital that they cannot derive from parents without

college experience.

Conclusion #2: During the Search Stage, Students Sought Information and Assistance from Teachers, Followed by Older Siblings and Counselors

Teachers and counselors. Within the school context, students singled out

teachers and counselors as sources of college information and assistance. The influence

of teachers and counselors has also been documented by researchers (Hossler et al., 1999)

as a leading source of information for students experiencing the search stage during their

junior year of high school. In this study of Mexican American first-generation college

students, I found that teachers and counselors often provided information about college

costs, and financial aid, and personal knowledge about particular higher education

institutions.

In terms of college costs and financial aid, students reported learning from teachers and counselors about scholarships, the FAFSA application process, and other information related to paying for college. Teachers and counselors also most often provided information about institutions. They informally provided information about institutions they were familiar with. For example, students mentioned that their teachers often shared their college stories with them. Student also acquired information formally about institutions based on class assignments that required students to research colleges and informational sessions presented by college representatives and coordinated by counselors.

The findings concerning the role of teachers as sources of information during the search stage align well with previous research on where students seek information. Hossler et al. (1999) concluded that students seek information primarily from teachers and guidance counselors when they are learning about colleges. Teachers in this study provided the most information and assistance during the participants' search stage. Teachers mostly provided students with information about college costs and financial aid.

High school students interact with their teachers on a daily basis in the classroom. Thus, it is not surprising that participants identified teachers more often than counselors as providing access to information about college and assistance with college processes. Participants did not report much interaction with their counselor. Kirst and Venezia (2004) suggested that students speak with teachers more frequently about college planning than with counselors because teachers are more accessible. Several participants did not mention counselors as sources of information or assistance. Moreover, six of the 17 participants reported that counselors had not been helpful in assisting them in securing

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information about colleges. Students often described having to initiate contact with their counselors to receive college information or assistance. Participants wished that their counselor was more proactive and sought them out first to offer them information about college or assistance with search stage processes. In most cases, counselors were reactive rather than proactive about providing students with access to information about the college search process or about colleges.

In sum, the overall findings show that teachers and counselors provided both information about college and assistance with search phase processes. Participants were aware of the role of counselors as potential sources of information about college and assistance and sought out their counselors. In spite of counselors' efforts, only two participants explicitly expressed being satisfied with their counselor. While most participants say that were not able to rely on counselors for adequate college information and assistance, 15 out of 17 said that teachers helped them by providing information about college. This finding supports the need for greater investigation into the influence of counselors in the overall discussion of the role of teachers and counselors as sources of information about college and assistance with college processes during the search phase.

Older siblings. The majority (12 of 17) of participants indicate that they turned to older siblings for college information or assistance during the search phase. In fact, siblings were central figures in the participants' search phase. Siblings provided participants with information about college and/or assistance with search stage processes. Consistent with the literature (Ceja, 2001; González et al., 2003; P. A. Pérez, 2007), older siblings were sources of information about financial aid and college in general. Students reported that they most often received information about college costs and assistance with

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financial aid processes from their older siblings. Older siblings also provided general information about college and offered advice as the students considered different colleges.

The type of assistance the participants reported receiving from siblings is consistent with what Ceja (2001) describes as the essential role that siblings play as information sources in the college choice process. Older siblings were valuable sources of information about college and provided assistance with college search activities as participants navigated their way through the search stage. Participants seemed to feel more comfortable with the college choice process in general if they received information and assistance from an older sibling who had already experienced the college choice process.

The findings from this study support the notion that the involvement of older siblings in the college choice process may also be a type of social capital that can assist younger siblings in realizing college aspirations (Sandefur et al., 2006). McDonough (1997) found that several White, female high school seniors in her study benefited from an older sibling's experience with the college choice process when they were planning for college. The findings from this study of Mexican American first-generation college students provide additional evidence that supports exploring older siblings as a potential source of social capital.

Conclusion #3: The Institutions that Students Considered for Application and Attendance were Heavily Influenced by Older Siblings

Older siblings influenced the institutions that students considered for application and attendance. In some cases, students were drawn to the institution that a sibling attended while in other cases students resisted the sibling's alma mater. These findings

are supportive of previous research that found that older siblings have an influence on the colleges that students consider (Hossler et al., 1999; Kaczynski, 2011; P. A. Pérez, 2007). The majority of participants included their siblings' college or university on their list of potential institutions. In several instances, participants reported that older siblings were supportive of their interest in the older sibling's institution. When students expressed an interest in the institution, supportive siblings often shared positive experiences about the institution and confirmed that the institution was a good option for the sibling to consider.

Among this group of Mexican American first-generation college students, some expressed a desire to attend college with their older sibling. Students were often drawn to attend school with their sibling because they saw their sibling as source of support, which demonstrates the significance of having a family member attending the same institution. Students' comments affirm results from Kaczynski's (2011) study regarding the influence of siblings on a student's college choice process. Kaczynski's study revealed that students were drawn to their sibling's institution because they saw the sibling as a source of comfort. Then again, the results of this study indicate other reasons for why participants were drawn to their sibling's institution. For example, three students reported that they considered attending their sibling's college, not because of their sibling's attendance at the institution, but because they liked what the institution had to offer. In addition, others considered their sibling's college even though their sibling was no longer attending the institution.

Ceja (2006) claims that older siblings who go to college pave the path to college for younger siblings in the family. Results from this study explore this sibling influence further and find that older siblings pave the path to a *particular* college as well. In other

words, older siblings' familiarity with ASU clearly influenced students to consider ASU for application and attendance.

Eleven of the 17 participants initially considered applying to their sibling's institution, but three participants indicated that an older siblings' current attendance at a particular institution was the key reason that the student did not consider applying to their siblings' college. These three participants reported that they wanted to be different from their sibling or that growing up, they were frequently compared with their older sibling by other people and going to a different college served as a means to end this comparison. The participants in this study who did not want to consider their sibling's institution believed that they could build a new identity if they were not at the same school as their sibling.

Conclusion #4: An Institution's Distance from Home had a Great Influence on where Students Applied and Enrolled

When students applied to colleges, distance from home was a consideration for 10 students, thereby indicating that distance from home has a greater influence on where students applied than family, peers, and teachers and counselors. Moreover, the majority (12) said they chose to enroll in ASU primarily because it was close to home. Students cited being close to home more often than any other reason for choosing to enroll at ASU. Staying close to home played an important role for participants both during the search and choice phases. Attending a college that was close to home influenced the institutions that parents encouraged and discouraged. During the choice stage, this same factor influenced where students applied and where they eventually enrolled. Despite the impact of distance from home on eventual college enrollment, the results indicate that students did not define "staying close to home" in the same way. For some students,

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going to a college near their home meant living at home while going to college. Other students wanted to attend an institution in the state of Arizona.

A number of researchers (Admon, 2006; Carreras, 1998; López Turley, 2006) found that Latina/os have a preference for institutions that are closer to home. López Turley used a quantitative approach to investigate the influence of parents who feel it is important for their children to live at home while attending school (college-at-home parents) and of parents who do not feel living at home is important (college-anywhere parents) and found that college-at-home parents were more likely to be Latina/o. López Turley also reported that parents' "preferences have a significant influence on their children's college application patterns" (López Turley, 2006, p. 840). Although López Turley illuminates the effects of parental preferences on children's college application patterns, using just two categories to differentiate parental preferences has limited our understanding of the preferences of parents for the Mexican American first-generation students in this study. Parental preferences differed across participants. The results of this study showed that there were parents who wanted their child to live at home, parents who found it acceptable that their child lived on-campus while attending ASU, and others who felt it was important for their child to attend school somewhere in the state of Arizona. Nonetheless, it is important to keep in mind that these results are based on students' interpretations of their parents' preferences, where as López Turley utilized a survey in which "parents were asked about the importance of their child's 'ability to attend school while living at home''' (López Turley, 2006, p. 831).

Admon (2006) suggested that the preference for staying close to home among Latina/o students may be culturally-based. Admon argued that Latina/os are more

attached to their homes and families than White and African American students, and as a result would be more likely to apply to and attend a local college. Similarly, Carreras (1998) reported that Latina/o participants were more likely to apply to institutions that were closer to home than to those further away.

Although researchers and practitioners have debated whether Latina/o preferences for applying to a college close to home is beneficial or a hindrance or whether students want to stay home or are being forced to stay home by their families (Admon, 2006; Carreras, 1998; Ceja, 2001; P. A. Pérez, 2007; Rooney, 2008), participants consistently reported that they chose to stay close to home because they wanted to stay close to their families. The data from this study provides evidence that students were reluctant to leave home because they wanted to stay close in order to help their families.

Much of the Latina/o college choice research indicates that Latina/os are unwilling to apply to and attend institutions that are far away from home (Admon, 2006; Carreras, 1998; Ceja, 2001). Whereas six students wanted to go to an institution close to home and never considered attending an out-of-state college, four students were interested in attending out-of-state schools because they wanted to experience living away from their families and Arizona. Admon speculated that the aversion to going away to school is due to Latina/o attachment to their homes and families. In the face of contradicting research (Admon, 2006; Carreras, 1998; Ceja, 2001) some participants considered applying or attending an out-of-state institution. Three of the four students followed up on this interest and applied to at least one out-of-state institution. However, most students did not follow through on their initial interest. Most of the participants who toyed with the idea of going away to college indicated that they did not follow

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through with applying to an out-of-state institution either because they concluded that they could not afford it or because their family's support or encouragement for college attendance appeared to be conditional on them staying close to home. In sum, rather than being unwilling to apply to and attend institutions that were far away from home (Admon, 2006; Carreras, 1998; Ceja, 2001), students were unable to apply to and attend for reasons related to cost and family preferences that they go to school close to home.

According to Hossler and Gallagher's (1987) model, "during the choice stage, students compare the academic and social attributes of each college they have applied to and seek the best value with the greatest benefits" (Hossler et al., 1999, p. 150). However, being close to home was the number one reason for choosing ASU for six of the students; thus this preference indicated that they chose to attend ASU because it was close to home. Moreover, while seven students did make references to an academic or social attribute as being one of their top reasons for choosing ASU, as a group, distance from home was a significantly more important consideration than academic and social attributes. This finding indicates that Mexican American first-generation students in this study did not make college enrollment decisions consistent with traditional models of college choice.

Conclusion #5: Institutional Type had a Great Influence on where Students Applied

Students mentioned institutional type more often than family, peers, and teachers and counselors as an influence on where they applied. The students described being averse to applying to a community college and communicated the perceived disadvantages of enrolling in a community college.   Participants described a perceived lack of academic rigor in community college classrooms. Students wanted to go to an

institution of higher education where the coursework would be more demanding and where they could demonstrate that they could do college-level work. The perception that community colleges were not academically challenging often came from older siblings who chose to attend a community college after high school. Victoria's sister, for example, told her that attending community college was like "going back to high school again" and urged her to attend a university if she wanted to be academically challenged.

Nine students had siblings (and in one case cousins) who had chosen to attend a community college after high school. Four of these nine participants were unwilling to apply to a community college based on their older siblings' or cousins' experiences attending a community college. Furthermore, two of these four participants indicated that their siblings had spent (or were spending) more than two years at the community college earning their associate degree. Two others explained that their siblings or cousins left community college before earning any credential. For students whose siblings had some experience with community college, two applied to the local community college "as a backup" or safety net against not attending college all together. In general, however, this group of students was unwilling to apply to a community college.

Six of the 17 participants were discouraged from attending a community college by their parents, peers, teachers, or counselors. For example, Cindy was told by a teacher that her transition to college would be easier if she started at a university rather than beginning at a community college and then transferring to a university two years later. In addition, although her friends never directly discouraged her from applying to a community college, Cassie concluded that she should not apply to community colleges because her friends were all applying to universities. Although previous studies show

that much of the growth in college enrollment among Latina/os has been at community colleges (Fry, 2002, 2012; Johnson, 2006), most students in this study were reluctant to apply to a community college. Cultural capital provides a framework for understanding why 10 of the 17 participants valued universities over community colleges.

McDonough (1997) proposed that "a student's *cultural capital* will affect the level and quality of education that a student intends to acquire" (p. 8). Furthermore, DiMaggio (1982) found that cultural capital may affect the quality of the college a student chooses to attend. It is generally accepted that middle- and upper-class students possess the most valued forms of cultural capital (McDonough, 1997; Perna, 2006). This perspective implies that students from low socioeconomic backgrounds lack the necessary cultural capital to know about the "value, importance, and process" (Jun & Colyar, 2002, p. 204) of accessing a university education. However, it is clear that the students in this study had social networks that allowed them to access the cultural capital necessary to aspire to attend a university rather than a community college.

Conclusion #6: Cost and Financial Aid had a Great Impact on Students' Choice of College

Cost and financial aid had a greater influence than family, peers, teacher, or counselors on students' enrollment decisions during the choice stage. Cost and financial aid were closely linked for participants. Nine of the 17 participants chose ASU because their financial aid awards allowed them to be able to afford the cost of ASU attendance. For two of the 17 participants, being able to afford ASU was critical to their capability to achieve access to a university. That cost and financial aid were important factors in participants' choice of ASU aligns with previous research that found that issues related to cost and financial aid can limit and determine students' institutional options (Kinzie et

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al., 2004; Mendez, 2003; L. X. Pérez, 1999). For two of the 17 participants, institutional options were limited to colleges that they could afford and not necessarily the one they wished to attend.

Research examining the effects of cost and financial aid on the Latina/o college choice process indicates that a low cost of attendance and generous financial aid makes a college more accessible and attractive to Latina/os and consequently can influence which college they choose for enrollment (Bhagat, 2004; Rooney, 2008). Furthermore, Ceja (2001) found that Chicanas consider cost even before they are making decisions about which school to attend. However, for most students in this study, cost did not emerge as an influence during the predisposition or search stages, or even during the application process. In fact, 14 of the 17 participants did not consider a community college, the most affordable option.

A review of relevant public documents revealed that whereas the average tuition (including fees) of Arizona's 19 public community colleges is $1,225 (American Association of Community Colleges [ACC], 2012), tuition and mandatory fees at ASU in fall 2010 totaled $8,132 (ACC, 2012). Furthermore, while ASU's Obama Scholars Program subtracts an Expected Family Contribution to determine funding (ASU, n.d.-d), several community colleges offer a President's Scholarship Program that is not need-based - and for which many participants would have qualified - that provides a tuition waiver for up to four semesters. While attendance at a community college would have been less of a financial burden for many participants, after eliminating this more affordable option, participants' strategy was to apply to the institutions they were most interested in and subsequently attend the institution that offered them the most generous

financial aid award. Thus, participants generally did not seriously consider cost of attendance until they were deciding where they were going to enroll.

Study Implications for Theory, Policy, and Practice

This section outlines recommendations for theory, policy, and practice based on the findings described earlier. The theoretical implications involve an examination of the study's frameworks in light of the study's findings.   Next, I consider the implications for policies at the state and institutional levels.   Finally, the implications for practice describe how the findings can be applied to address the needs of Mexican American first-generation college students.

Theory

This study was informed by two college choice models, Hossler & Gallagher's (1987) three phase model of college choice and Perna's (2006) proposed conceptual model of student college choice. In general, the models proved to be useful for describing the college choice process of Mexican American first-generation students who have an older sibling with college experience. Study results confirm that students progressed through a three-stage process: decided to go to college, searched for information about college, and applied and enrolled (Hossler & Gallagher, 1987). Also, findings demonstrate that indicators of cultural and social capital and aspects of the school context (Perna, 2006) can assist in explaining the decisions that students made during the college choice process.

Although Hossler and Gallagher's (1987) model is possibly the most widely cited and used college choice model, some researchers have questioned the applicability of the model for students of color and students from low SES backgrounds (Bergerson, 2009b).

In this study of Mexican American first-generation students, the findings validate that students progress through a three-stage process, but they also contribute to findings of others who have critiqued the model. As an example, finding confirms that Hossler and Gallagher's model, which assumes that all students have equal access to information about college, falls "short of explaining the college choice process of students who are not able to tap into some information sources" (Bergerson, 2009b, p. 35). The data in this study show that not all students had equal access to information about college. Some students, like Cassie, Genesis, and Mariela, were involved in pre-college programs that guided them through the college choice process while other students, like Edwin and Patrick, seemed to have progressed through the process without receiving information one-on-one about college from anyone. In addition, because no parent had ever enrolled in college as a degree-seeking student, only four of the 17 participants were able to tap into parents as an information source. Thus, although the Hossler and Gallagher model in general proved to be useful for describing the college choice process of Mexican American first-generation students who have an older sibling with college experience, other models may more precisely explain the choice process of this group of students.

For instance, in recognition that the Hossler and Gallagher (1987) may not thoroughly explain the college choice process of my population, I chose to enhance Hossler and Gallagher's model by incorporating Perna's (2006) proposed conceptual model of student college choice. However, findings also suggest that a modification to Perna's (2006) model is in order. Perna's model assumes that a student's college choice process is influenced by four layers: (1) the student's habitus; (2) school and community context; (3) the higher education context; and (4) the broader social, economic, and

policy context. A key finding of this study is that parents and siblings may constitute a fifth layer of influence in the college choice process. In order for Perna's model to adequately explain participants' college choice process, the model should integrate a family context. In a discussion of the key variables included in the model, Perna twice alludes to the inclusion of a family context. First, she states, "quantitative research has also begun to examine the ways in which the *family* [emphasis added], school, and community context influence student college choice (e.g., Perna and Titus, 2005)" (p. 142). Furthermore, Perna asserts:

> Although college choice is ultimately based on a comparison of the benefits and costs of enrolling, assessments of the benefits and costs are shaped not only by the demand for higher education and supply of resources to pay the costs but also by an individual's habitus and, directly and indirectly, by the *family* [emphasis added], school, and community context, higher education context, and social, economic, and policy context. (p. 119)

Although Perna refers to the family's influence on the college choice process when describing her model, there is no reference to family in the visual representation of her model (see Perna, 2006, Figure 3.1). The findings from this study suggest that the model could be improved by adding a family context (layer five) or including this context along with the school and community context (layer two of the model). Including the family with the school and community context would be an acceptable approach because Perna identifies the school and community as social structures but not the family. Yet, the family has also been recognized as a social structure (Sorenson, Goodpaster, Hedberg, & Yu, 2009). Moreover, Perna asserts that social structures can facilitate or

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impede student college choice through availability of resources, types of resources, structural supports and barriers. Research has documented the ways in which the family can facilitate or impede student college choice (Bergerson, 2009a; A. F. Cabrera & La Nasa, 2001; Ceja, 2001; Contreras-Godfrey, 2009; Gomez, 2005). Thus, Perna's model could be expanded further to include family as a social structure that influences the college choice process.

In addition to expanding Perna's model, the findings of this study also have implications for traditional conceptualizations of cultural and social capital. According to Perna (2006), cultural capital may be manifested in terms of cultural knowledge and the value placed on college attainment. This cultural knowledge may be measured by a composite of SES, cultural activities (taking music, art, or dance classes), attitudes, knowledge, and parents' educational attainment (Perna, 2006). In addition, Perna contends that parents' educational attainment may also be a proxy for values about higher education. These traditional indicators of cultural capital, however, reflect a construct of cultural capital as defined from a middle- and upper-class point of view (DiMaggio & Mohr, 1985; McDonough, 1997; Perna, 2006). Given this study's findings regarding the lack of fit of traditional notions of cultural capital to participants' experiences, it is worth acknowledging that although some Mexican American first-generation students may not possess the cultural capital of "mainstream populations" (Trueba, 2002, p.7), they may nevertheless possess cultural capital that facilitates college enrollment.

The role of parents during participants' college choice process illustrates how parents who did not go to college and have little economic capital can also transmit high cultural capital to their children. During the predisposition stage, the students' parents

were the most influential factor. Students' aspirations were shaped by their parents' values about higher education. The participants said that their parents valued postsecondary education as a means of ensuring economic security. Therefore, parents transmitted cultural capital by informing their children about the value of securing a college education (McDonough, 1997).

In terms of reconceptualizing social capital, parental involvement during participants' college choice process provides a framework for understanding the role of low-income and working-class parents as transmitters of social capital. While some perspectives (Bourdieu, 1986; Perna & Titus, 2005) suggest that Latina/os are disadvantaged because of the low levels of social capital available through their social networks, other research (González et al., 2003) asserts that Mexican American parents have the capacity to transmit the types of social capital that are valued in the college enrollment process.

In this study, students had discussions with parents in which parents made a connection between college and a better life and discussed their regret of not continuing their own education. Perna's (2006) proposed that parental involvement, which includes parent-student discussions about college, is a form of social capital that may increase the likelihood of college enrollment. Indeed, I found that conversations with parents often translated into motivation to attend college for participants. Frequently, these parent-student discussions were the driving force behind participants' desire to go to college to prevent economic struggles or because they wanted to take advantage of an educational opportunity not available to their parents.

In sum, this study presents an alternative perspective regarding conceptualizations of cultural and social capital. Despite not going to college and having little economic capital, parents transmitted high cultural capital to participants. In addition, parents transmitted the social capital that may increase the likelihood of college enrollment. These findings support the need to redefine cultural and social capital or introduce a new cultural capital (Trueba, 2002) and social capital to traditional college choice models.

Finally, at the level of theory and research, we need to make the definition of first-generation college student more precise by distinguishing among distinctive first generation groups defined by whether the student is the first in the family to attend college and by parental and sibling educational attainment. First-generation groups and the "outlooks, experiences, and beliefs" (McDonough, 1997, p. 9) about college that they get from their families matter during the college choice process. Consistent with previous work (Cohen, 2006; Cooper et al., 2002; González et al., 2003; Hurtado, 1997) evidence has been presented in this study that suggests that participants' first-hand knowledge of college attendance via an older sibling places them in a different group than first-generation students who come from families where there is no history of college attendance. For instance, in this study, most participants had available within the family context the information and assistance necessary to make decisions about college. Additionally, other research (Ceja, 2006) found that planning for college was a greater challenge for first-generation (parents' highest level of education is a high school diploma or less) Chicanas who did not have older siblings with college experience than for first-generation Chicanas that had older siblings who had already gone to college.

In the immigration literature, the term *1.5-generation* has been used to describe Americans who immigrated to the U.S. as a child or an adolescent (Kim, Brenner, Liang, & Asay, 2003; Rumbaut & Kenji, 1988). The general consensus is that although these individuals are similar to first-generation Americans who immigrated to the U.S. as adults, they may have more in common with second-generation Americans who were born in the U.S. (Kim, et al., 2003). In other words, the 1.5 generation is neither part of the first generation, nor are they part of the second generation; rather, rather, they constitute a distinctive group (Rumbaut & Kenji, 1988). The application of the term 1.5 generation to undergraduates whose parents never enrolled in college but who have older siblings who went to college before them is an interesting possibility.

Policy

This study found that many students sought information and assistance from high school teachers and counselors, which has implications for state and institutional policymakers. High schools need to be concerned about and involved in promoting college opportunities. Students are relying in part on teachers and counselors to provide a type of social capital necessary for college enrollment (Perna, 2006). It is important to acknowledge, however, that high schools alone cannot be held accountable for college preparation. Many high school teachers and counselors are engaged in attending to other requirements, such as test administration and course scheduling, and have less time than ever to help students prepare for college (Kirst & Venezia, 2004). State-level policy should hold both high schools and higher education institutions responsible for college preparation and enrollment. One way to achieve this is to establish a K-16 governing board with legislated authority to develop and implement policies (Kirst & Venezia,

2004). In Arizona, the governor recently created the Arizona Ready Education Council (formerly known as the Governor's P-20 Council), which includes representatives from K-12 schools, community colleges, and universities (Arizona Executive Order No. 2011-08, 2011). Although this council does not have the authority to develop and implement policies, it will lead the implementation of Arizona's education reform plan, a plan that includes college and career ready goals for both high schools and postsecondary education (Arizona Executive Order No. 2011-08, 2011).

At the same time, high school and higher education policy must create opportunities for students and their families to access the intervention strategies that increase the likelihood that students will enroll in college. Intervention strategies that may influence college enrollment include visitations to postsecondary institutions, academic tutorial sessions, and collecting and disseminating information about postsecondary institutions (A. F. Cabrera & Caffrey, 2001). One strategy for providing access to intervention strategies is through strong partnerships between high schools and colleges and universities. Some of these partnerships can take the form of outreach programs such as the Talent Search Program and GEAR UP (A. F. Cabrera & La Nasa, 2001). Talent Search, a federal TRIO program, is designed to increase the number of students from disadvantaged backgrounds who complete high school and enroll in and complete postsecondary education (ED, OPE, 2011b). Likewise, GEAR UP is designed to significantly increase the number of low-income students who are prepared to enter and succeed in postsecondary education (ED, OPE, 2011a).

One of the participants in this study, Victor, participated in a Talent Search program that was part of a partnership between his high school and a local community

college. His experience confirms the capacity of outreach programs to successfully enable students to enroll in college. Victor benefitted from Talent Search activities that included college and test preparation, academic advisement, success seminars, and college trips. In addition, Talent Search programs promote parent and family involvement by providing workshops and counseling for families of participants (ED, OPE, 2011b). Providing information to parents is important because information may be what parents need to become involved in decisions pertaining to their children's college planning activities (A. F. Cabrera & La Nasa, 2001). High schools and institutions of higher education should collaborate to make programs such as Talent Search and GEAR UP available to more students.

An additional policy implication is related to cost and financial aid. For participants, cost and financial aid were primary factors that influenced where they enrolled. Eleven of the students in this study were Obama Scholars, the name given to recipients of the President Barack Obama Scholars Program, an ASU financial aid program that provides funding for direct costs of attendance (e.g., tuition and mandatory fees, a standardized allowance for books/supplies, room and board) for Arizona freshmen from families that earn less than $60,000 (ASU, 2009). This financial aid program that combines gift aid from federal, state, private, and institutional sources with Federal Work-Study was a key factor in student's choice of ASU for enrollment and should be duplicated at other universities. However, ASU and other schools looking to create financial aid programs for a similar population should consider two changes to the Obama Scholars Program to make it more effective.

First, financial aid awards should take into account indirect costs of attending the college or university (e.g., special class fees, study abroad program fees, academic program fees, summer and winter tuition/fees). To get the full experience of college, students need to be able to participate in campus life beyond attending classing and returning home at the end of the day. Research has shown that minority and low-income students in particular may need additional sources of financial aid to cover costs beyond tuition, fees, and books (Hahn & Price, 2008). Thus, the financial aid package could be improved by meeting indirect costs of attendance. Alternatively, colleges and universities can play an active role in helping students to connect to programs outside of the institution that can help them meet indirect costs. Just as they inform students of the need to fill out the FAFSA to qualify for the aid necessary to pay for the direct costs of college, colleges and universities should publicize and disseminate information about additional resources to finance the indirect costs of college. This type of information would have been helpful for participants who reported that they had underestimated the indirect costs of college and therefore had not pursued additional funding opportunities, resulting in financial pressures during their first year of college.

Second, ASU and other schools looking to create financial aid programs for a similar population should replace or reduce loans with aid that does not require repayment. Students reported that they had borrowed the maximum loan limits for subsidized and unsubsidized Direct Stafford Loans to meet additional costs (e.g. program fees, special class fees, and specific housing associated with a major; parking permits; books/supplies). It is important to note that loans helped participants meet their college costs. Nevertheless, the use of loans in the Obama Scholars financial aid package is

worrisome because research suggests that Latina/os are less willing to borrow for college (Cunningham & Santiago, 2008; Millet & MacKenzie, 1996), thereby suggesting that the participants may not be representative of the typical Latina/o student. Therefore, it is plausible that the loans offered in the Obama Scholars package may have deterred some Latina/o students from selecting ASU for enrollment. If institutions are willing to reduce Latina/o students' debt burden, they might be more likely to increase enrollment of this group of students.

Practice

This section offers recommendations for practice that may be beneficial in addressing the needs of Mexican American first-generation college students. First, this study has practice implications for colleges and universities. To begin, conversations with students revealed the need for financial aid counseling during the college choice process to help students understand their financial aid award. Most students said that they attended ASU because they received the most generous financial aid award from this institution. However, Patrick, for example, indicated that he was awarded Federal Work-Study (FWS) as part of his Obama Scholars award, but he had limited knowledge about FWS.

> ASU gives everybody work study which I didn't know. When I got my financial aid package it said $2,000 of work study, so like so many hours. The more work study you get the more money you're allowed to work for. I don't know how it really worked but I never got a work study job and I thought I was. Everyone thinks they are going get a work study job but you don't.

Patrick struggled financially his first year due to his inability to find a work-study job. He had to cover $2,000 in costs that he thought would be covered by a work-study job.

ASU does provide a "Frequently Asked Questions" page with financial aid information for students but none of the frequently asked questions provided on the page directly address FWS (ASU, n.d.-b). Information about student employment information available on this page is buried deep within the text-heavy web page. In addition, the wording of the information may lead students to believe that student employment jobs are plentiful on-campus. The website urges students to visit a website "to view all types of student job listings" (ASU, n.d.-b, "My financial aid does," para. 1) but it does not offer alternatives to students who might be unable to secure a FWS position. This web page needs to be more user-friendly and FWS information should be updated on a regular basis. ASU could take the approach of other universities, such as Augusta State University, which tells students on its Financial Aid Office page how many students it employs under FWS (Augusta State University Financial Aid Office, 2012). In doing so, students will be better informed about the likelihood of finding a FWS job.

A second implication for colleges and universities is related to participants' preferences for staying close to home and unwillingness to attend a community college. Taken together, these factors greatly limited students' application and enrollment options. Fourteen of the participants were from the Phoenix metropolitan area. For these students, ASU was the only four-year, public university located within 50 miles of their home (ED, IES, & NCES, n.d.). Moreover, while there are an additional six four-year, not-for-profit universities located in the Phoenix metropolitan area, these schools attract a very narrow group of students, such as architecture majors (Frank Lloyd Wright Foundation, n.d.) or American Indian Pentecostals (American Indian College, 2010). The limited number of four-year, public and not-for-profit institutions of higher education in the Phoenix

metropolitan area is a concern because ASU may not be the best match for students that are interested in attending a four-year university. By not looking outside Arizona, or outside the Phoenix metropolitan area, students may simply be choosing ASU because it is close to home, but not because it meets their needs and interests (López Turley, 2006).

For this reason, Arizona colleges and universities outside of the Phoenix metropolitan area should take into account the geographic preferences of students. Participants expressed a desire to go to a college near their home for family reasons. Strategies for encouraging students to go further away from home for college might include arranging campus visits for both students and their families. Students in this study did not indicate that their parents visited NAU, the school that most students applied to after ASU. In fact, several students never visited NAU themselves. Rather, students decided to apply to NAU as a back-up. Had students and their parents visited the campus they might have been more open to a college further away from home. To recruit more students outside their local area, institutions should make the campus visit process as convenient and inexpensive as possible for student and their families. Parents may not be familiar with the process of college visits and may not have the money to visit a campus that is further from their home. Institutions that are further away from a student's home, such as NAU, may want to organize one-day bus trips from several high schools in the Phoenix area for students and their families. To increase and diversify their enrollment, universities might consider more active and creative recruitment strategies beyond sending representatives to schools to sit behind a table at a college fair.

Colleges and universities can also engage parents of current students in the recruitment process. Parent and family associations, for example, can help Latina/o

parents of prospective students feel connected to the institution and more comfortable

about the distance. NAU has invited parents to assist with off-campus Future Freshman

Receptions and Freshman Orientation events in Flagstaff (NAU Admissions, 2011) but

because Latina/o parents are more likely than other racial/ethnic groups to feel it is

important for their children to live at home while attending college (López Turley, 2006),

parent and family associations should consider reaching out to Latina/o parents before the

application process. If parents are comfortable with the idea of their children living away

from home to attend college, students are more likely to apply to the university (López

Turley, 2006).

UA, who works closely with the Parents and Family Association to involve

parents in recruiting events such as adopting a high school, attending recruitment fairs or

making recruiting phone calls (Ruiz-McGill, 2012), is more likely to reach parents who

are concerned about having their children apply to a school far from home. However,

there is no documentation that the UA actively seeks Latina/o parent recruiters or that

recruitment efforts target parents of Latina/o prospective students. However, involving

Latina/o parents of current students in outreach to Latina/o parents of prospective

students is important for UA to consider because Latina/o parents may be more likely

than other parents to make information about college more "easily accessible . . . in

linguistically and culturally appropriate forms" (Tierney & Auerbach, 2005, p. 42).

What is more difficult to address is a student's preference to stay close to home in

order to be near their family. While it would be difficult for a student living far away

from home to see their family at any time or every weekend, especially if they did not

own a car, the college or university could put in place a transportation option that would

make it possible for students to go home every weekend, if needed. Colleges and universities often offer special bus transportation to the airport or to local cities during scheduled breaks. If colleges outside the metropolitan Phoenix area want to recruit students from the Phoenix area, they could offer bus transportation to and from this area every weekend. Students might be persuaded to attend a school that is further away – and their parents might be more willing to support this option – if they did not have to make their own transportation arrangements in order to see their families frequently.

This study also has implications for high schools. The findings from this study indicated that many students sought information and assistance from counselors, but most students were dissatisfied with the minimal amount of interaction that they had with their counselors. Several students indicated a desire for one-on-counseling, but this may not be a viable option given Arizona's 815-to-1 student-to-school counselor ratio (American School Counselor Association, n.d.). Recommending that Arizona reduce its student-to-school counselor ratio seems like an obvious recommendation, but given the current state of the economy, this is likely not an option.

In high schools where more individual attention is not possible, partnering with colleges and universities can be a means for high school counselors to dedicate more time to college counseling. For example, some research suggests that college academic advisors should collaborate with high school guidance counselors to provide high school students with information about academic programs (Arms, Cabrera, & Brower, 2008). The notion put forward is that college advisors can "communicate the value of academic advising and the potential benefits that advising affords to students" (Arms et al., 2008, p. 16). Thus, if academic advisors interact with students while they are still in high school,

not only can academic advisors provide information and assistance during the college choice process, but students are more likely to act upon the advice of their college advisors once they are in college (Arms et al., 2008). In this type of partnership, the academic advisor can have an impact both on the path to college and on the path to graduation.

Partnerships between high school counselors and colleges and universities can be configured in several ways. At Colorado Springs Early Colleges, a tuition-free public charter high school (Colorado Springs Early Colleges, 2012), students are placed in groups according to their career interests (Schanfield, 2010). College professors team up with high school advisors to make the curriculum relevant as they engage students in a career exploration process (Schanfield, 2010). In California, AT&T Foundation contributions were used to fund a pilot program which employed California State University upper division and graduate students in counseling and related career programs to offer pre-college advising to high school students (Fallis, 2008). In addition, at Louisiana Tech University, the Student Government Association recruited college students to serve as mentors to students in local schools beginning in eighth grade and continuing through high school graduation (Beer, Livingston, & Tobacyk, 2011). The primary responsibilities of the mentors were to reassure students that they could achieve their post-high school academic goals and provide support and advice as needed (Beer et al., 2011).

The partnership models presented above all require the physical presence of the college or university at the high school; however, high schools should also consider using an e-advising model to guide partnerships. The advantages of e-advising include quicker

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responses from the advisor, advisor's ability to handle multiple students, and the student does not need to make an appointment (The University of Michigan-Flint Academic Advising and Career Center, 2007). Colleges can play a larger role in college counseling if they assign an admissions counselor to specific high schools and make them available to prospective students via online tools. At the University of Michigan-Flint, current students can work with an academic advisor online via MSN®Messenger, AOL Instant Messenger(SM), AOL Instant Messenger(SM) Express, and Yahoo Instant Messenger (The University of Michigan-Flint Academic Advising and Career Center, 2007). At Burlington County College, current students can schedule face-to-face group academic advising sessions with visual and auditory feedback (Burlington County College, 2012). By adapting these e-advising models, high school counselors will not be providing students with face-to-face communication, but high school students, who tend to be tech-savvy, are likely to accept on-line communication strategies. At the same time, it is important to keep in mind that research has shown that Latina/os are less likely to have advanced features at home such as broadband access or faster computers (Warschauer, 2003) that are necessary for students to take advantage of many online communication tools. For this reason, high schools and colleges and universities should also partner to provide access to computers and the Internet to Latina/o students during and outside school hours.

High school administrators should also develop particular strategies to support counselors' efforts. Counselors alone cannot be held responsible for encouraging college attendance and for preparing students to make decisions about postsecondary options. Rather, high school leaders should commit to building a school culture in which all

school personnel provide a consistent message to students that supports a college preparatory experience and where teachers partner with counselors to prepare students for college (McClafferty et al., 2002). Here are a few guidelines suggested by McClafferty et al. for building this type of school culture:

1. [Teachers] and administrators share their own [college] experiences and discover their own assumptions about their roles in preparing students for college. (p. 10)

2. All students are to be prepared for a full range of postsecondary options and the explicit goals of this preparation must be clearly defined, communicated, and a part of the daily culture of the school, such that students, family, teachers, administrators and staff recognize the role that each plays in preparing students for college. (p. 12)

3. Although counselors are likely to have primary responsibility for collecting and maintaining resources, [teachers] should be aware of what's available and incorporate it into daily classroom practices on a regular basis. (p. 14)

4. [Teachers] must be active partners in the creation and maintenance of a college culture. . . . Teachers must make themselves available to parents to answer any questions and make decisions about students' academic futures. (p. 20)

The findings of this study also make a case for the need to build strong relationships between high schools and parents. Participants' decisions to go to college were influenced by parents, yet in most cases parents were unable to help students prepare for college. Participants' information about college was acquired mostly from teachers, siblings, and counselors. However, high schools should also provide parents with opportunities to gain knowledge about the college planning process (McClafferty et al., 2002). In doing so, parents can become informed partners in the process of building the high school's college culture (McClafferty et al., 2002).

McClafferty et al. (2002) outlined ideas for informing parents about the college preparation process so parents can support high schools' efforts in "achieving the goal of getting a postsecondary education [for students], and not accepting anything less" (p. 23).

In particular, McClafferty et al. point to college fairs sponsored by a partnership between UCLA, a non-profit, public interest organization, and local schools that provide parents with opportunities to speak with college representatives and sit in on workshops that address topics related to preparation for college. At the same time, high schools themselves can increase parental involvement in the college choice process by creating opportunities for parents to visit the school; providing a range of opportunities to learn about college, offered at a variety of times of day and days of the week; and employing multiple means of communication so that parents can learn about what is happening in the school regarding college preparation (McClafferty et al., 2002).

There also is a role for community involvement in supporting high schools' efforts to encourage college attendance and prepare students to make decisions about postsecondary options. Epstein and Salinas (2004) suggested the creation of school learning communities that include "educators, students, parents, and community partners who work together to improve the school and enhance students' learning opportunities" (p. 12). As part of these school learning communities, the authors advocate for "an organized program of school, family, and community partnerships with activities linked to school goals" (Epstein & Salinas, p. 12). The application of school learning communities to the college choice process means that educators, parents, and community partners help students focus on their plans for college and on the education requirements they must fulfill to meet their goal of college attendance. Epstein and Salinas point to the Mother-Daughter College Preparation Program in Los Angeles that helps 5th grades Latinas and their mothers think about college and Going On To (GOT) College, a program that helps students and their family plan students' middle and high school years

to enable students to qualify for college, as examples of how schools can create effective programs of family and community involvement.

Finally, this study's findings also have implications for pre-college programs. The findings indicate that older siblings with college experience were a key influence on participants' decisions to go to college and were one of the top sources of information and assistance for students during the search stage. Taken together, these findings support the need for the inclusion of older siblings in pre-college programs designed to enable students to access higher education.

The importance of parental involvement in pre-college programs (Jun & Colyar, 2002; Oesterreich, 2000; Tierney, 2002) should not be minimized. However, pre-college program directors have described challenges associated with parental involvement (Swail & Perna, 2002). Some research (Gandara, 1995) has speculated that life circumstances such as competing family and work demands may restrict parental involvement. The kinds of life challenges that parents face as they try to meet pre-college programs' expectations for parental involvement speaks to the need to expand involvement to include other family members.

A low-cost option for pre-college programs seeking to involve older siblings is to allow the older sibling to substitute for the parent when the parent cannot attend a program event. There are currently pre-college programs that follow this practice. For example, the University of Southern California's Neighborhood Academic Initiative, a pre-college enrichment program, requires parents to attend seminars but if parents are unable to attend due to work or other obligations, they may send someone in their place, including an adult sibling (Thomas Barrios, n.d.). However, by allowing older siblings

with college experience to substitute for parents, pre-college programs may benefit from siblings' knowledge about higher education.

Directions for Further Research

This study's findings suggest several directions for future research. An interesting finding of this study of Mexican American first-generation college students was the influence of older siblings with college experience on their younger sibling's college choice process, especially during the predisposition and search stages. During the predisposition stage, siblings reinforced expectations of college attendance. In the search stage, siblings provided college information and assistance, and influenced the colleges that students considered for their list of tentative institutions. Additional research on the role of siblings during the college choice process can provide further insights into this very important influence.

Future studies that explore the influence of siblings on the college choice process should include the point of view of the sibling in order to understand why siblings participate in their younger siblings' college choice process. Future researchers might employ the construct of *familismo* (familism) (Updegraff et al., 2005) to address the links between older sibling values, beliefs, and practices and participation in the college choice process. Work on adolescent sibling relationships in Mexican American families suggests that *familismo*, thought to be a key feature of Latina/o and Mexican American culture (Updegraff et al., 2005), may promote older siblings contribution to the college choice process because of the *familismo* values of family support and obligation.

As an example, taken as a whole, the stories shared by participants who had younger siblings suggest that they felt an obligation to be engaged in their younger

siblings' college choice processes. From participants' point of view, they had a

responsibility to impart their knowledge of the college choice process to and share

college experiences with their younger siblings. It was clear that participants wanted to be

a resource for their younger siblings and that it was important to them to advise their

siblings throughout the college choice process. Gloria talked about her intentional

involvement ("butting in") with her younger sister's process in order to ensure that her

sister was planning for college earlier than she had.

> I've been butting in [and giving her advice] about college. I know when I was
> around her age, I wasn't even thinking about college that much, and I think it's
> really important to start thinking. . . . I want to make sure my little sister definitely
> at least has an idea or is thinking about it. I don't want her to get to the point
> where I was, and it's like, "Whoa! I have to go to college <u>now</u>, or not."

Mariela also offered her junior high age sister unsolicited advice. When I inquired about

whether her younger sister was asking her for advice about where to go to college,

Mariela responded, "No, not yet. She's still in her own little world," but she continued,

"She's trying to decide whether she wants to go to normal high school or to the program

that I did. She's still trying to decide that. I keep telling her to do the college prep."

Likewise, Michelle explained that she and her sister who is closest to her in age and is a

junior at ASU were going to prepare their twelve-year-old sister for college by planning

her high school experiences.

> We're trying to prepare her [for college] and keep [college] in the back of her
> mind. She's going to be entering high school in about a year, so we're trying to
> prep her for the clubs that she has to enter, the grades that she should have . . .
> getting involved to get into the college that she wants.

The above examples show that some older siblings with college experience make

proactive efforts to get involved in their younger siblings' college choice processes.

Future researchers should more thoroughly investigate the process of how a sibling decides to be engaged in their younger sibling's process.

In addition, future studies should continue to document the factors that enable, rather than prevent, students from accessing a four-year college directly from high school. Although accessing a four-year college is an elusive goal for many Latina/os (Saenz et al., 2007), this study identified factors that played important roles in students' ability to realize their goal of beginning their education at a four-year institution. How students access a four-year college is an important area of research because over half (55%) of Latina/os begin their postsecondary education at a community college (Adelman et al., 2003), yet students who start at a community college are significantly less likely to obtain a bachelor's degree (Admon, 2006; Benítez & DeAro, 2004; Laden, 2004).

Researchers should also continue to employ qualitative methods when studying the college choice process. This study demonstrated the power of a qualitative study to provide "a *complex*, detailed understanding" (Creswell, 2007, p. 40) of the college choice process of a unique population. To be sure, quantitative studies allow researchers to examine understudied populations while also contributing results that may provide a broad understanding of trends, associations, and relationships, but qualitative studies can tell us why someone responded the way they did and how an individual's answers were shaped by their contexts (Creswell, 2007). Therefore, the use of qualitative research allows for a deeper understanding of the college choice process. Although quantitative research is frequently employed to study college choice (Bergerson, 2009a; Bryan et al., 2009; Engberg & Allen, 2011; Roderick et al., 2011; Roszkowski, 2010; Taggart &

Crisp, 2011; Walke, 2010), qualitative studies are also essential to understanding the college choice process (Perna, 2006).

Additionally, in recognition of the strengths of both quantitative and qualitative approaches to studying the college choice process, mixed-methods approaches may be the most effective approach to understanding the college choice process of Mexican American first-generation college students who have an older sibling with college experience. One approach to designing a mixed method study might include collecting survey data from a large, random sample and selecting for in-depth interviews a "small, nonrandom, purposeful sample" (Merriam, 2009, p. 224). The reporting of statistical analyses from this type of study could contribute "the evidence necessary to arrive at useful conclusions and recommendations" (Hossler et al., 1999, p. 3) while interviews could enhance survey findings by making "the decision-making process come alive" (Hossler et al., 1999, p. 3).

Another recommended area of future research is a study exploring the relationship between the college choice process and institutional persistence for Mexican American first-generation students. For instance, research has already shown that factors shaping the college choice process among Latina/o students (e.g., parental expectations, encouragement, and support) also impact their subsequent baccalaureate degree completion (Arbona & Nora, 2007; Swail et al., 2005c). This finding suggests that the college choice process is associated with persistence. It is possible that for the students in this study, the college choice process was a factor in institutional persistence. During their second interviews, Victoria revealed that she had transferred to a community college and Patrick shared that he was no longer enrolled in college. Although both Victoria and

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Patrick described challenges they encountered in college that led to poor academic performance, their stories suggested that college choice factors and outcomes (A. F. Cabrera & La Nasa, 2000a) may have also contributed to their leaving ASU. Victoria had to leave ASU when her cumulative GPA made her ineligible for the Obama Scholars program. One question to consider is whether Victoria's high school failed to assist her in securing the cultural capital to enable her to prepare for academic success at ASU.

Meanwhile, Patrick chose to attend ASU, his "safety school," because he could not afford to attend his first and second choice universities. He also had to leave because his GPA made him ineligible for the Obama Scholars Program. While it is true that ASU could have been clearer with him about GPA requirements and the expenses he would incur if he did not meet renewal criteria, the literature suggests that his lack of success at ASU may also have been a result of his lack of institutional commitment to ASU (Nora & Cabrera, 1993). Students' intents to persist and actual persistence behavior appears to be related to institutional commitment (institutional fit and certainty of choice) (Nora & Cabrera, 1993).

During his first interview, Patrick indicated several times that he did not feel that he belonged at ASU. He kept stressing throughout the interview that he only attended ASU because he could not afford to attend school out-of-state. He also indicated that he did not perceive there was any practical value in an education from ASU. He did not think that his education at ASU would help him get a better job than an education from his first choice institution, FIDM/Fashion Institute of Design & Merchandising, or that his education at ASU would help him secure future employment in his preferred major, interior design. He asserted, "I didn't want to [major in interior design at ASU] because

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they do have an interior design program here but I feel like interior design at ASU, what are you going to do with- like where can you go?" Patrick also displayed a lack of loyalty to ASU, as indicated by the lack of importance he attached to graduating from ASU compared to graduating from a top interior design school (Nora & Cabrera, 1993). He expressed, "now that I'm [at ASU] I'm just like- I want to go somewhere even higher. I want to go somewhere more difficult."

Finally, as evidenced by the above examples, Patrick also exhibited a lack of certainty of choice. According to Nora and Cabrera (1993), had Patrick been certain of his choice of ASU, he would have been confident that he made the right decision in choosing to attend ASU and he would have been certain that ASU was the right choice for him. Taken together, Patrick's lack of institutional fit and certainty of choice led to a lack of institutional commitment that may have had an effect on his intent to persist and actual persistence. A longitudinal study that continues after a student has enrolled in college would be helpful in terms of examining the relationship between the college choice process and persistence.

Lastly, research exploring the role of high school teachers and counselors on the predisposition stage of Latina/o students who have not made the decision to attend college prior to high school is also needed. Teachers and counselors do not appear to influence the decision to go to college. However, most students reported that many of their high school teachers and counselors (and in one case, a coach) expected and encouraged them to go to college. This finding is puzzling in that despite their efforts, teachers and counselors were not successful in being perceived as influencing participants' college aspirations. Several possible suggestions (e.g., most participants had

already decided when they began high school that they were going to attend college) were made in the previous chapter, but a thorough examination of the role of teachers and counselors on the predisposition stage is required. Traditional models of college choice indicate that students decide in grades 7-9 whether they want to attend college (A. F. Cabrera & La Nasa, 2000a), but several participants did not make the decision to attend college before ninth grade. This finding indicates that a traditional model may be inadequate to assess the college choice process of Mexican American first-generation students.

Study Limitations

As is the case with qualitative case study research, this study has limited generalizability (Merriam, 2009). The findings reported here "reflect situation-specific conditions in a particular context" (Merriam, 2009, p. 225) and should be thought of as "working hypotheses" (Merriam, 2009, p. 225). An important contribution of this study was an examination of how the college choice process may be different for Mexican American first-generation students *who have an older sibling with college experience*. I provided insights into how specific factors (e.g. parents, older siblings, peers, and teachers and counselors) influenced the college choice process. These findings may be applicable to students and/or institutions with similar characteristics (Merriam, 2009), but researchers, practitioners, and policymakers should take into account students' contexts, including: students' habitus; school and community context; the higher education context; and the broader social, economic, and policy context (Perna, 2006), when making decisions about how to apply the findings.

The sample itself poses another limitation. The original design called for an examination of the college choice process of students who had an older sibling with a bachelor's degree. Some research has shown that students whose parents have some college experience, but not a bachelor's degree, do not have an advantage over those whose parents have no postsecondary education, in terms of the likelihood of enrolling in postsecondary education (Choy, 2001). Therefore, the original design was guided by the assumption that in order for students to gain the most benefits from having a sibling with college experience, the sibling had to have a bachelor's degree. However, data from the Participant Preliminary Questionnaire (Appendix B) revealed that only 21 of the 100 respondents who submitted a completed questionnaire had an older sibling who had earned a bachelor's degree. Recruitment efforts did not yield 12 total participants, an ideal number that previous research studies (Cohen, 2009; González et al., 2003) indicated would have allowed for redundancy (saturation) (Merriam, 1998) and "reasonable coverage of the phenomenon" (Patton, 2002, p. 246). The inability to get the appropriate sample size for saturation made it necessary to expand the inclusion criteria. Interviews were conducted with five students who had an older sibling with a bachelor's degree (all but one from ASU); three students who had an older sibling with an associate degree; eight students who had an older sibling enrolled at a university (all but one at ASU); and one student who an older sibling who had completed some coursework at ASU but left before obtaining a degree. Including only students whose siblings had a bachelor's degree would have resulted in "far more confidence that the conclusions adequately [represented]" (Maxwell, 2005, p. 89) other first-generation Mexican American students who have an older sibling with college experience.

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An additional limitation of this study relates to the timing of data collection. This study asked students to self-report on a process that traditionally occurs in grades 7-12 (A. F. Cabrera & La Nasa, 2000a). Students in this study were already enrolled in their second semester of college when the first interviews occurred. Students were asked about their retrospective college choice behaviors and decisions that had occurred several months and/or years prior to the initial interview. While students recalled many features of their college choice process and generally provided rich, detailed responses, there were a few instances when students acknowledged that there were elements of their experiences that they could not remember. Some students were able to provide additional information during the second interview, after reviewing their interview transcripts, and when contacted via e-mail with follow-up questions, but interviewing students in the summer before they start college or during their first semester of college may have allowed students to remember more about their college choice process.

Finally, this study focused on students who enrolled in college; whether students persisted at ASU was not taken into account. Nevertheless, follow-up interviews revealed that Victoria had transferred to a community college and Patrick was no longer enrolled in college. Researchers have suggested that the dramatic gap between the share of Latina/os attending college and the share attaining bachelor's degrees (Fry, 2002) is related to the decisions that Latina/os are making during the college choice process (Arbona & Nora, 2007; Swail et al., 2005c). However, guided by the theoretical frameworks, this study focused on the fact that students were able to successfully navigate the college choice process by enrolling in higher education and did not focus on persistence or degree attainment.

Conclusion

Responding to the call of researchers interested in the college choice process of Latina/o students (Cohen, 2009; O'Connor et al., 2010; Taggart & Crisp, 2011), this study contributes to the further understanding of the college choice process decisions among Mexican Americans and details specific influences (e.g., parents, older siblings with college experience, peers, and teachers and counselors) that affected their college choice behaviors. The main findings from this study show that for Mexican American first-generation college students, parents and older siblings had the greatest influence on the predisposition phase, or the decision to go to college (Hossler et al., 1999). Also, during the search phase, when students search for general information about college (A. F. Cabrera & La Nasa, 2000a) and learn about specific institutions and their characteristics (Hossler, et al., 1999), students sought information and assistance from teachers, older siblings, and counselors. Lastly, in the choice phase, when applications are completed and the student chooses a particular institution for enrollment (Hossler et al., 1999), students were most influenced by an institution's distance from home, institutional type, and cost and financial aid.

Research has shown that as transmitters of social capital (González et al., 2003), parents play a critical role in the college choice process through their involvement in their children's education (Perna, 2006). In this study, parental involvement was manifested through parent-student discussions about college. Furthermore, other findings suggest that knowledge and information that may have promoted college enrollment was also acquired via participant contact with older siblings and sibling-student discussions about college-related subjects. Although not as influential as parents and older siblings, peers

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and teachers and counselor also transmitted social capital through their involvement with participants. This last finding supports research that found that that college enrollment rates are positively related to the volume of social capital that is available through school social networks (Perna & Titus, 2005).

Because a primary function of social capital is to enable access to other forms of capital, including cultural capital (Perna, 2006), through their relationships with parents, older siblings, peers, and teachers and counselors, participants gained access to the cultural capital necessary for knowledge about higher education and placing a high value on a college education. McDonough (1997) noted that cultural capital "is that property that middle and upper class families transmit to their offspring which substitutes for or supplements the transmission of economic capital" (p. 8). This study of a primarily working class population detailed how parents transmitted cultural capital by informing participants about the value of a college education. Furthermore, older siblings played an important role in informing participants about the process of securing a college education. In addition, peers advised participants as to how to plan to enroll in college, had high educational expectations, and provided information about college. Teachers and counselors also transmitted cultural capital by informing students about the process for securing a college education (McDonough, 1997).

Many researchers, policymakers, and practitioners recognize that improving the college enrollment and graduation rates for Latina/os will make an important contribution to the United State's goal of having the highest proportion of college graduates in the world by 2020 (Lederman, 2010; Lumina Foundation, 2011; Santiago & Callan, 2010). Consequently, it is crucial that future researchers continue to document the factors that

enable Latina/o students to access college directly from high school. Further research on the college choice process decisions among Latina/os can lead to the design of policies and practices beneficial to Latina/o students and their families, including: (1) holding both high schools and colleges and universities responsible for college preparation and attendance; (2) developing strong partnerships between high schools and colleges and universities; and (3) creating more institutional financial aid programs.

Researcher Reflections

As mentioned in chapter three, my interest in this subject stemmed primarily from my personal background. One of the most memorable occasions of my life was seeing my brother graduate from college with a bachelor's degree. I anticipate that in a year, when my youngest sister crosses the stage to receive her degree from the same university, the moment will be no less gratifying. Their path to a bachelor's degree began with the decision to go to college. While I agree with research that maintains that parents have the strongest influence on the development of educational aspirations (A. F. Cabrera & La Nasa, 2000a), I also believe that my encouragement, in the form of maintaining high educational expectations for them, becoming involved in school matters, discussing college plans with them, and saving for college (A. F. Cabrera & La Nasa, 2000a) also had an influence on their educational plans.

I was able to involve myself in their college choice process in ways that our parents, Mexican immigrants who did not go to college, could not. That is not to say that my parents were not also involved. They informed my brother and sister about the value of higher education and maintained high educational expectations for them. However, I was able to teach my brother and sister about college at a young age by having them

spend time with me on the various college and university campuses where I attended and/or worked for the past eighteen years. They were also informed about the value of higher education by interacting with my friends and family-in-law, many of whom are college-educated. In addition, I was able to provide them with extensive information about college and assistance with college choice processes. When I was not able to provide information or assistance, I had a vast social network of friends and acquaintances who worked in higher education that I could draw upon to find the information or assistance that my brother or sister needed. After my brother and sister enrolled in college, I closely monitored their transition, inquiring about grades, providing financial assistance, and looking for university resources that could help them with their academic and social adjustment.

Having completed this research study, I now understand that not all siblings with college experience are able to provide the level of information and assistance that I provided my youngest brother and sister. My values, beliefs, and practices (Updegraff et al., 2006) regarding their college choice process were likely different than what participants reported about their siblings. I have concluded that a higher socioeconomic status (as measured by my advanced degree and corresponding income) and more access to cultural and social capital helps explains why no participant in this study described a sibling that was as involved as I was throughout my youngest siblings' predisposition, search, and choice stages. Nevertheless, I recognize that it is not possible – or even desirable, perhaps – for all siblings to be the "helicopter" sibling that I was during my youngest siblings' college choice process. However, participants in this study confirmed

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that their older siblings who have attended or are attending college played a significant

role in their college choice process.

Appendix A: Participant Recruitment Email Invitations

Direct E-mail Invitation

To: [Email]
From: "[Email] via surveymonkey.com" <member@surveymonkey.com> Verify
Subject: Seeking Participants for a Paid Research Study

Salutation: Dear [First Name],

I am a first-generation (my parents did not go to college) Mexican American doctoral student at the University of Maryland College Park who is studying the process by which students decide whether and where to go to college. I would like to invite you to participate in my dissertation study focusing on Mexican American/Chicano first-generation freshmen students.

I am seeking participants whose parent(s) DID NOT go to college and whose older sibling(s) DID go to college. If this describes you, I invite you to complete a questionnaire that asks you some questions to help me determine whether you are eligible to participate. This questionnaire is confidential; only I will have access to your name or email address. In appreciation for completing the questionnaire, you will be entered into a drawing to win an electronic gift card worth $50 from amazon.com.

You can complete the questionnaire at http://www.surveymonkey.com/s.aspx. This link is uniquely tied to you. Please do not forward this message. This website contains the questionnaire along with information about your protection rights as a human subject of research. This questionnaire should take approximately 5-10 minutes to complete.

At the end of the survey you will be asked if you are interested in being interviewed for my dissertation study. If you are selected, you will need to agree to participate in up to two interviews lasting approximately 60 minutes each. These interviews will occur during the Spring 2011 semester. I will ask questions during the interviews that center around your experiences preparing for college. The first interview will occur at your ASU campus and the second will occur over the phone, both at a time and location that are convenient for you. In appreciation for your participation, I will give you $20 in cash after each interview.

Your participation is appreciated and important to the success of this research study. If you have any questions about this study, please contact me ([Email]) or my advisor, Dr. Sharon Fries-Britt ([Email]). Thanks for your participation!

Sincerely,

Dora

Dora Elías McAllister

Ph.D. Candidate, Higher Education, University of Maryland College Park
[Link to University of Maryland Higher Education program student bio web page]

Please note: If you do not wish to receive further emails from me, please click the link below, and you will be automatically removed from my email list.
http://www.surveymonkey.com/optout.aspx

You are receiving this email because you were identified as a Hispanic, full-time, freshman, first-generation student at Arizona State University. Your email address was obtained from the University Office of Institutional Analysis. ASU allows researchers to use email to send its students information about research opportunities. The content of this email message has been approved by the University of Maryland College Park Institutional Review Board.

Sample Email to Key Informant (excluding TRIO Directors)

Subject: Recruitment email

Below you will find my recruitment email. I would appreciate you sending it to any [Key Informant's Campus] students or groups of students that might be eligible for my study. Thanks again for your help.

----------Message----------

Dear Student,

I am a first-generation (my parents did not go to college) Mexican American doctoral student at the University of Maryland, College Park who is studying the process by which students decide to go to college. I would like to invite you to participate in my dissertation study focusing on Mexican American/Chicano first-generation college students.

I am seeking participants whose parent(s) DID NOT go to college and whose older sibling(s) DID go to college. If this describes you, I invite you to complete a questionnaire that asks you some questions to help me determine whether you are eligible to participate. This questionnaire is confidential; only I will have access to your name or email address. In appreciation for completing the questionnaire, you will be entered into a raffle to win an electronic gift card worth $50 from amazon.com.

You can complete the questionnaire at https://www.surveymonkey.com/s/2R982HY. This website contains the questionnaire along with information about your protection rights as a human subject of research. This questionnaire should take approximately 5-10 minutes to complete.

At the end of the survey you will be asked if you are interested in being interviewed for my dissertation study. If you are selected for an interview, you will need to agree to

participate in up to two interviews lasting approximately 60 minutes each. These interviews will occur during the Spring 2011 semester. I will ask questions during the interview that center around your experiences preparing for college. The first interview will occur at your ASU campus and the second will occur over the phone, both at a time and location that are convenient for you. In appreciation for your participation, I will give you $20 in cash after each interview.

Your participation is appreciated and important to the success of this research study. If you have any questions about this study, please contact me ([Email]) or my advisor, Dr. Sharon Fries-Britt ([Email]).

Sincerely,

Dora

Dora Elías McAllister
Ph.D. Candidate, Higher Education, University of Maryland, College Park
email: [Email]
[Link to Higher Education program student bio web page]

Sample Email to TRIO Director

Subject: Email Request for Dissertation Study

Please send the following email to all students currently enrolled in TRiO at the [TRIO Director's campus] who meet the criteria listed below. Feel free to modify the email text as needed. The text includes a link to participate in a short questionnaire. If you need any additional information from me before sending this email, please do not hesitate to get in touch with me. I want to make sure the right students get the email. Thank you again for your assistance.

> 1- Mexican American ethnic background OR Hispanic/Latino but country of origin is unknown
> 2- First-generation college student
> > -NEITHER parent has enrolled in a college or university as a degree-seeking student (my definition) OR NEITHER parents has a bachelor's, master's, or doctorate degree (TRiO's definition)
> 3- First-time freshman student
> 4- Graduated from high school in 2009-2010
> 5- Enrolled at ASU in 2010-2011
> 6- Arizona Resident

----- Message-----

Subject: Request to Participate in a Research Study

Dear TRIO Student,

I am writing to invite you to participate in a dissertation study conducted by Dora Elías McAllister, a first-generation (her parents did not go to college) Mexican American doctoral student at the University of Maryland, College Park who is studying the process by which students decide whether and where to go to college. Her dissertation study is focused on Mexican American/Chicano first-generation college students.

She is seeking participants whose parent(s) DID NOT go to college and whose older sibling(s) DID go to college. If this describes you, I invite you to complete a questionnaire that asks you some questions to help her determine whether you are eligible to participate. This questionnaire is confidential; only she will have access to your name or email address. In appreciation for completing the questionnaire, she will enter you into a raffle to win an electronic gift card worth $50 from amazon.com.

You can complete the questionnaire at https://www.surveymonkey.com/s/2R982HY. This website contains the questionnaire along with information about your protection rights as a human subject of research. This questionnaire should take approximately 5-10 minutes to complete.

At the end of the survey you will be asked if you are interested in being interviewed for her dissertation study. If you are selected for an interview, you will need to agree to participate in up to two interviews lasting approximately 60 minutes each. These interviews will occur during the spring 2011 semester. She will ask questions during the interview that center around your experiences preparing for college. The first interview will occur at your ASU campus and the second will occur over the phone, both at a time and location that are convenient for you. In appreciation for your participation, she will give you $20 in cash after each interview.

The TRIO Academic Achievement Center is not directly involved in this research and does not receive any direct benefits from your participation. However, the findings from this study may inform the program and potentially provide findings on how students like you make decisions regarding college attendance. Your participation in this research is completely voluntary. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

Your participation is appreciated and important to the success of this research study. If you have any questions about this study, please contact Dora ([Email] or [Phone]) or her advisor, Dr. Sharon Fries-Britt ([Email]).

Sincerely,

TRIO Director

Sample Email to Student Organization Leaders and Advisors

To: [Student Leader Email]; [Student Leader Email]; [Advisor Email]
Subject: Research Study on Mexican American/Chicano College Students Seeks Participants

Hello.
I am writing to you because of your involvement with [Student Organization]. I am writing to request that you forward my email seeking participants for my dissertation study. I am seeking ASU students who: (1) identify as Mexican American/Chicano; (2) are first-generation college students (parents did not go to college); (3) are freshmen; and (4) have an older sibling who went to college. I would greatly appreciate it if you would please forward my recruitment email (see below) to your members. If you have questions or would like more information about my study, please feel free to contact me by phone at [Phone]. I can also be reached by email at [Email]. Thank you.

Sincerely,

Dora

Dora Elías McAllister
Ph.D. Candidate, Higher Education, University of Maryland College Park
cell phone: [Phone] | email: [Email]
[Link to Higher Education program student bio web page]

-------------Recruitment Email-------------

Subject: Research Study on Mexican American/Chicano College Students Seeks Participants

Dear Student,

I am a first-generation (my parents did not go to college) Mexican American doctoral student at the University of Maryland College Park who is studying the process by which students decide whether and where to go to college. I would like to invite you to participate in my dissertation study focusing on Mexican American/Chicano first-generation freshmen students.

I am seeking participants whose parent(s) DID NOT go to college and whose older sibling(s) DID go to college. If this describes you, I invite you to complete a questionnaire that asks you some questions to help me determine whether you are eligible to participate. This questionnaire is confidential; only I will have access to your name or email address. In appreciation for completing the questionnaire, you will be entered into a drawing to win an electronic gift card worth $50 from amazon.com.

You can complete the questionnaire at https://www.surveymonkey.com/s/2R982HY. This website contains the questionnaire along with information about your protection rights as a human subject of research. This questionnaire should take approximately 5-10 minutes to complete.

At the end of the survey you will be asked if you are interested in being interviewed for my dissertation study. If you are selected for an interview, you will need to agree to participate in up to two interviews lasting approximately 60 minutes each. These interviews will occur during the Spring 2011 semester. I will ask questions during the interview that center around your experiences preparing for college. The first interview will occur at your ASU campus and the second will occur over the phone, both at a time and location that are convenient for you. In appreciation for your participation, I will give you $20 in cash after each interview.

Your participation is appreciated and important to the success of this research study. If you have any questions about this study, please contact me ([Email]) or my advisor, Dr. Sharon Fries-Britt ([Email]).

Sincerely,

Dora

Dora Elías McAllister
Ph.D. Candidate, Higher Education, University of Maryland, College Park
email: [Email]
[Link to Higher Education program student bio web page]

Appendix B: Participant Preliminary Questionnaire (Web-Based Survey)

1. Introduction

Thank you for taking the time to complete this questionnaire. Your answers are important in helping me determine if you are eligible to participate in my dissertation study.

This questionnaire should only take about 5-10 minutes of your time and your answers will be kept confidential. By filling out the questionnaire you can be entered into a drawing for a $50 electronic gift card from amazon.com.

Any questions marked with an asterisk (*) require an answer in order to continue through the questionnaire.

If you have any questions about the survey, please contact Dora Elias McAllister at [Email] or call [Phone].

In order to progress through this survey, please use the following navigation buttons:

-Click the Next button to continue to the next page.
-Click the Previous button to return to the previous page.
-Click the Exit the Questionnaire Early button if you need to exit the questionnaire.
-Click the Submit button to submit your questionnaire.

2. Consent Form

Project Title: First-Generation Mexican American Students' Perceptions of Factors Influencing their Path to Enrollment in a Four-Year University.

Purpose of the Study: This research is being conducted by Dora Elías McAllister, a doctoral candidate at the University of Maryland, College Park. I am inviting you to participate in this research project because you may: (1) come from a Mexican American ethnic background; (2) be a first-generation college student where neither of your parents have enrolled in a college or university as a degree-seeking student; (3) have an older sibling who has enrolled in a college or university as a degree-seeking student (4) be a first-time freshman student who graduated with a high school diploma in June 2010 or thereafter. The purpose of this research project is to study the process by which students decide to go to college, under the guidance of Dr. Sharon Fries-Britt.

Procedures: The procedure involves the completion of one survey. The total time for your participation will be 5-10 minutes. In appreciation for your participation, you will be entered into a drawing to win an electronic gift card worth $50 from amazon.com.

Potential Risks and Discomforts: There are no known risks associated with participating in this research project.

Potential Benefits: There are no direct benefits to you, but I hope that in the future other people might benefit from this study through improved understanding of how students like you make decisions regarding college attendance.

Confidentiality: The information collected from this survey will be kept confidential and will be used to confirm your eligibility for this study only. Any potential loss of confidentiality will be minimized by storing data in a password protected computer. In addition, (1) If you provide your first name on the survey, a code will be placed on the survey; (2) through the use of an identification key, the researcher will be able to link your survey to your identity; and (3) only the researcher will have access to the identification key. Further, all information collected on the participants not eligible for the study will be destroyed.

Right to Withdraw and Questions: Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator, Dora Elías McAllister at [Email] or [Phone] or Sharon Fries-Britt, Associate Professor at [Email] or [Phone]. Both can also be contacted at: [Campus Mail Address], University of Maryland, College Park, MD 20742-1165.

Participant Rights: If you have questions about your rights as a research participant or wish to report a research-related injury, please contact: University of Maryland College Park; Institutional Review Board Office; 0101 Lee Building; College Park, Maryland, 20742; E-mail: irb@umd.edu; Telephone: 301-405-0678. This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.

*Statement of Consent: Your participation indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You may print a copy of this consent form using your web browser's print option.

If you agree to participate, please click "I Agree/Consent" below.

○ I Agree/Consent

3. Questions

*Q1. Age on March 1, 2011:

*Q2. Gender:

*Q3. Term of High School Graduation:
> *Choices displayed in a drop-down menu: Spring 2011; Fall 2010; Summer 2010; Spring 2010; Fall 2009; Summer 2009; Spring 2009*

Comments (Optional):

*Q4. Term of enrollment as a first-time freshman at Arizona State University.
> *Choices displayed in a drop-down menu: Spring 2011; Fall 2010; Summer 2010; Spring 2010; Fall 2009; Summer 2009; Spring 2009*

Comments (Optional):

*Q5. Are you enrolled in a bachelor's degree (BA, BAE, BAS, BIS, BS) program at Arizona State University?
> *Choices displayed in a drop-down menu: Yes; If no, please explain.*

*Q6. Major:

*Q7. Your Campus:
> *Choices displayed in a drop-down menu: Downtown Phoenix; Polytechnic; Tempe; West; Online*

Comments (Optional):

*Q8. Your Residency Status:
> *Choices displayed in a drop-down menu: Arizona Resident; Nonresident*

Comments (Optional):

*Q9. Are you of Hispanic, Latino or Spanish origin? (Select all that apply.)
> *Choices displayed: Yes, Mexican, Mexican American, Chicano; Yes, Puerto Rican; Yes, Cuban; Yes, another Hispanic, Latino or Spanish origin-Provide origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, etc.:*

Origin:

Q10. What is the highest level of education that your parent(s) have completed?

(Select ONE for each parent.)   Mother   Father

> *Choices displayed in a drop-down menu: Less than high school; High school graduate/GED; Attended college but did not complete degree; Associate's Degree (A.A., A.S., etc.); Bachelor's Degree (B.A., B.S., etc.); Master's Degree (M.A., M.S., etc.); Doctoral Degree (Ph.D., J.D., M.D., etc.); Don't Know; Not Applicable*

Comments (Optional):

*Q11. Please provide the age(s) of your older sibling(s):

Older Sibling #1 is the sibling who is closest to you in age. Continue in age order to the sibling who is furthest from you in age.

Older Sibling #1:
Older Sibling #2:
Older Sibling #3:
Older Sibling #4:
Older Sibling #5:
Older Sibling #6:

Q12. What is the highest level of education that your older sibling(s) completed?

Older Sibling #1 is the sibling who is closest to you in age. Continue in age order to the sibling who is furthest from you in age.

(Select ONE for each older sibling.)

Older Sibling #1
Older Sibling #2
Older Sibling #3
Older Sibling #4
Older Sibling #5
Older Sibling #6

> *Choices displayed in a drop-down menu: Less than high school; High school graduate/GED; Attended college but did not complete degree; Associate's Degree (A.A., A.S., etc.); Bachelor's Degree (B.A., B.S., etc.); Master's Degree (M.A., M.S., etc.); Doctoral Degree (Ph.D., J.D., M.D., etc.); Don't Know; Not Applicable*

Comments (Optional):

Q13. Additional comments about any questionnaire items:

*Q14. Are you interested in being interviewed for my dissertation study focusing on Mexican American/Chicano college students?

If you are selected for an interview, you will need to agree to participate in up to two interviews lasting approximately 60 minutes each. These interviews will occur during the Spring 2011 semester. I will ask questions during the interviews that center around your experiences preparing for college. The first interview will occur at your campus and the

second will occur over the phone, both at a time and location that are convenient for you. In appreciation for your participation, I will give you $20 in cash after each interview.

○ Yes, I am interested in being interviewed.

○ No, I am not interested in being interviewed.

Comments (Optional):

4. Interview

*If you are interested in being interviewed for my dissertation study focusing on Mexican American/Chicano college students, please provide the following contact information:

First Name:
Email Address:
Phone Number:

5. Drawing

Thank you for completing the questionnaire. Please enter your contact information below if you would like to be entered in a drawing to win an electronic gift card worth $50 from amazon.com. If you do not want to be entered in the drawing, click the [Done] button.

First Name:
Email Address:
Phone Number:

Appendix C: First Interview Guide (Face-to-Face)

Introduction

I am interested in learning more about the influences on your college enrollment. I will be asking you several questions about the process by which you decided to go to college. I will also be asking you some question about [Older sibling(s)]. There are no wrong answers and you should feel free to ask if you need clarification on any of the questions. The interview will likely last approximately one hour and will be recorded to make sure I accurately document all of your responses. I also will take a few notes while you are talking because it'll help me keep track of something you have mentioned that I might want to come back to, rather than interrupting you.

Question	Theoretical Framework
Tell me about yourself. How is it that you are here, at ASU?	N/A: Warm Up Question
• Who had an influence on your decision to go to college? • How did [Influence] influence your decision to go to college?	Hossler and Gallagher's three phase model of college choice: Predisposition phase

If not mentioned, probe for: (a) family (inc. older sibling(s); (b) high school (inc. teachers and counselors); and (c) peers. How did your _____ influence your decision to go to college?	• Hossler and Gallagher: Predisposition phase
	• Perna's proposed conceptual model of student college choice:
	   ○ Cultural capital: Value of college attainment
	   ○ Social capital: Information about college
	   ○ School context: Availability of resources, types of resources, structural supports and barriers

Why did you decide to pursue a bachelor's degree – as opposed to an associate degree, or a certificate program, for example?	• Hossler and Gallagher: Predisposition phase
Did anyone ever discourage you from going to college?	• Hossler and Gallagher: Predisposition phase • Perna: Cultural capital: Value of college attainment
When and how did you learn about which	Hossler and Gallagher: Predisposition

courses to take to prepare you for college?	phase

• How did you learn about college and who helped you get information about college?
 	
• How did [Influence] teach you about college and help you get information about college?
	• Hossler and Gallagher: Search phase
	• Perna:
	  o Cultural capital: Cultural knowledge
	  o Social capital: Information about college; Assistance with college processes

If not mentioned, probe for: (a) family (inc. older sibling(s)); (b) high school (inc. teachers and counselors); and (c) peers. How did your _____ influence how you learned about college and who how you got information about college?	• Hossler and Gallagher: Search phase
	• Perna:
	  o Cultural capital: Cultural knowledge
	  o Social capital: Information about college; Assistance with college processes
	  o School context

Where and from whom did you get information about how to pay for college?	• Hossler and Gallagher: Search phase
	• Perna:
	  o Cultural capital: Cultural knowledge
	  o Social capital: Information about college; Assistance with college processes

To how many colleges did you apply? What were they?	Hossler and Gallagher: Choice phase
• Describe who had an influence on where you applied? • How did [Influence] influence where you applied?	Hossler and Gallagher: Choice phase
If not mentioned, probe for: (a) family (inc. older sibling(s)); (b) high school (inc. teachers and counselors); and (c) peers. How did your _____ influence where you applied?	• Hossler and Gallagher: Choice phase • Perna: Social Capital: Assistance with college processes o School context

Were you discouraged from applying to certain schools?	• Hossler and Gallagher: Choice phase • Perna: ○ Social Capital: Assistance with college processes
Out of all the other places to which you applied and were offered admission, how did you decide to attend ASU?	Hossler and Gallagher: Choice phase
• Who had an influence on your decision to attend ASU? • How did [Influence] influence your decision to attend ASU?	Hossler and Gallagher: Choice phase

If not mentioned, probe for: (a) family (inc. older sibling(s)); (b) high school (inc. teachers and counselors); and (c) peers. How did your _____ influence your decision to attend ASU?	• Hossler and Gallagher: Choice phase
	• Perna:
	    ○ Social Capital: Assistance with college processes
	    ○ School context

Knowing what you know now about applying to college, would you do anything different? If yes, why? What would you do different?	• Hossler and Gallagher: Choice phase • Perna: Cultural capital: Cultural knowledge

Did you participate in any pre-college programs (e.g. TRIO, Upward Bound)? If yes, when did you get involved? How, if at all, did this program help you prepare for college?	• Hossler and Gallagher: Predisposition, Search, and Choice phases
	• Perna:
	    ○ Cultural capital: Cultural knowledge; Value of college attainment
	    ○ Social capital: Information about college; Assistance with college processes

If applicable: "In the questionnaire (or "When we scheduled this interview…), you _____. Can you tell me more about _____?	N/A
What else would you like to tell me about how	• Hossler and Gallagher:

you decided whether and where to go to college?	Predisposition, Search, and Choice phases
When it comes to college, what kind of similarities are there between you and [older sibling(s)]?	N/A
When you were making decisions about whether and where to go to college, what did it mean to you that you had a sibling who had already made these decisions?	• Hossler and Gallagher: Predisposition, Search, and Choice phases • Perna: Cultural capital: Information about college
What else would you like to tell me about [older sibling(s)]?	N/A

Participant Questions
- *Turn off recorder.*
- I've asked you a lot of questions. Do you have any questions for me?

Wrap Up
- Transcript: In May I'm going to email you a transcript of this interview. A transcript is a word by word documentation of everything we both said during this interview. I'm going to share it with you because I'd like you to review it and tell me if there's anything inaccurate in it. I also want to know if there's anything in the transcript that you would like me to exclude from the study because it would make you uncomfortable if you saw it in the final dissertation.

- Compensation: As promised, here is the $20 that I'd like to give you as a thank you for participating in this interview.

Appendix D: Second Interview Guide (Phone)

Introduction

In this interview, I want to find out more about how you arrived at the decisions of whether and where to go to college. First, I'm going to start by making sure that I correctly understood some of the information that you've given me. I'm going to follow up on some things that I don't understand or that I'm uncertain about – or that I forgot to ask you during the first interview. Then I'm going to ask you some new questions. The purpose of these new questions is to check out some thoughts and ideas that I came up with after having interviewed everyone in the study for the first time. Do I have your permission to record this interview?

Warm-Up Questions
- How did the rest of the semester go for you?
- What did you do this summer?
- Are you planning to return to ASU in the fall?
- How are you feeling about that?
- If returning: Will you be keeping your same major?

First Interview
- For students that did not respond to requests to review their first interview transcript, ask them questions that were inserted in the transcript.
- Ask questions that should have been asked during the first interview.
- Follow up on anything in the interview notes and/or interview transcript that doesn't "make sense" (Patton, 2002, p. 383).
- Follow up on any "areas of ambiguity or uncertainty" (Patton, p. 383).

Participant Profile
- For students that did not respond to request to review their Participant Profile.
- Read Participant Profile to student, paragraph by paragraph. After each paragraph, ask, "Is any of that inaccurate, or is there anything that you would like to add?"

Academic Preparation/Achievement
- Did you enroll in any AP courses in high school?
- What was your high school GPA? Do you know your high school class rank?

Demographic Characteristics
- What does your mother do for work?
- What does your father do for work?

Older Sibling(s)
- Describe your relationship with [college-educated older sibling(s)].
- Once you decided to attend college, did you ask [sibling(s)] for advice about where to attend?
- Did the fact [sibling] was enrolled at ASU encourage to you to apply and enroll? Discourage you?

- If [sibling] had not been enrolled at ASU would you have enrolled? Why or why not?

Younger Sibling(s) (If Applicable)
- Has [younger sibling] decided if they're going to attend college? If yes, are they asking you for advice about where to attend?
- Are you encouraging [younger sibling] to go to ASU? Discouraging them?
- If applicable: Describe your relationship with [younger siblings(s)].

Community College vs. University Attendance
- What do you think are the benefits (if any) of attending a university over a community college?
- Where did you learn about the benefits of attending a university?

General
- What else would you like to tell me about how you decided whether and where to go to college?
- Do you have any comments or anything else you would like to add to anything I've asked you in this interview?

Participant Questions
- Do you have any questions for me?

Wrap Up
- Transcript: I'm going to email you a transcript of this interview. I'm going to share it with you because I'd like you to review it and tell me if there's anything inaccurate in it. I also want to know if there's anything in the transcript that you would like me to exclude from the study because it would make you uncomfortable if you saw it in the final dissertation.

- Compensation: As promised, I'd like to mail you $20 as a thank you for participating in this interview. Is cash okay, or would they prefer a check? Where would they like me mail the $20?

- Future contact: Is it all right if I contact you again should I need more information from you to complete my study?

- Pseudonym: Do you still want to use [Pseudonym/Name] for this study, or would you like me to use a different [Pseudonym/Name]?

- Thank them for their participation and wish them luck in the upcoming school year. Tell them they can contact me if they ever have any college-related questions. I'd be happy to help.

Sample Individualized Questions: Alex
- Questions inserted into first interview transcript: (Alex did not respond to request to review his transcript.)

- o Can you list all of the financial aid you received, all grants, scholarships and loans? You don't need to include the amounts; I just want an idea of what your financial aid package looked like your first year.
- o *Alex: They did the best they could but they couldn't really help me out with paperwork and filling out financial aid forms and all that stuff.*
  - ▪ What about your brother? Was he able and/or willing to help you with this?
- o *Alex: I mean, she was helpful when I asked for the help but she was never really willing to, on her free time, to go help kids like us.*
  - ▪ What do you mean by "kids like us"?
- o What was your GPA when you graduated high school?
- o What grade is your brother in? (Your sister is a sophomore in high school, right?)
- o What is your cumulative GPA today?
- o What is the name of your high school?
- o Do you have any AP credits?
- o Were you involved in any activities, besides classes, your freshman year at ASU?
- o *Alex: I talked to my little sister.*
  - ▪ What did you say to her about college?
- o Think about your AP classes. We're they harder, easier, the same, as your ASU classes?
- In high school, were you involved in any high school or community activities?
- What were your most important reasons for going to college?

Sample Individualized Questions: Cassie
- In high school, who did you talk to about your plans after high school?
- Did either of your older sisters influence your decision to continue your education beyond high school?
- Did your parents teach you about college or help you get information about college?
- Did your high school teachers or counselor influence which schools you applied to?
- Did your high school friends or classmates influence your decision to attend ASU?
- Describe your relationship with [older sibling].

Sample Individualized Questions: Erika
- Follow-up questions from first interview:
  - o When I asked you "Can you describe who had a significant influence on your decision to go to college?" you answered "my mom was really encouraging." Can you tell me how your mother encouraged you go to college? For example, what did she say and what did she do?
  - o Can you tell me more about that - about them mentioning "maybe just one or two more schools"?
  - o You said you always wanted to go to ASU but you also said "I knew I always wanted to go to college, whether it'd be a small community college near home or anywhere really." Does that mean that at some point you considered going somewhere besides ASU?

- Questions that should have been asked during the first interview:
    - In high school, did you learn about college from your friends? If yes: How did you learn about college from your friends?
    - Did your friends help you get information about college? If yes: How did your friends help you get information about college?
    - Did you ever participate in any programs designed to teach you about college (e.g. TRIO, Upward Bound)? If yes, when did you get involved? How, if at all, did this program help you prepare for college?
    - Knowing what you know now about applying to college, would you do anything different? If yes, why? What would you do different?

Appendix E: Consent Form – Interviews

Project Title	**First-Generation Mexican American Students' Perceptions of Factors Influencing their Path To Enrollment in a Four-Year University**
Purpose of the Study	*This research is being conducted by Dora Elías McAllister at the University of Maryland, College Park. I am inviting you to participate in this research project because you: (1) come from a Mexican American ethnic background; (2) are a first-generation college student where neither of your parent has enrolled in a college or university as a degree-seeking student; (3) have an older sibling who has enrolled in a college or university as a degree-seeking student; and (4) are a first-time freshman student who graduated with a high school diploma in June 2010 or thereafter. The purpose of this research project is to study the process by which students decide to go to college under the guidance of Dr. Fries-Britt.*
Procedures	*The procedures involves up to two interviews, approximately four weeks apart, during which you will be asked questions about your experiences preparing for college. The total time for your participation will be 1-4 hours. The first interview will take place at your Arizona State University campus, at a private location convenient to you. The second interview will take place over the phone. You will receive $20 cash after the completion of each interview.*
Potential Risks and Discomforts	*There are no known risks associated with participating in this research project.*
Potential Benefits	*There are no direct benefits to you, but I hope that in the future other people might benefit from this study through improved understanding of how students like you make decisions regarding college attendance.*
Confidentiality	*Any potential loss of confidentiality will be minimized by storing data in a locked cabinet and password protected computer. In addition, (1) your name will not be included on collected data; (2) a pseudonym of your choosing will be placed on collected data; (3) through the use of an identification key, the researcher will be able to link your data to your identity; and (4) only the researcher will have access to the identification key. Further, all data collected will be destroyed 10 years after completion of the*

	study. *If I write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.*
Right to Withdraw and Questions	*Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.* *If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator, Dora Elías McAllister at [Email] or [Phone] or Sharon Fries-Britt, Associate Professor at [Email] or [Phone]. Both can also be contacted at: 3113 Benjamin Building, University of Maryland, College Park, MD 20742-1165.*
Participant Rights	*If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:* **University of Maryland College Park** **Institutional Review Board Office** **0101 Lee Building** **College Park, Maryland, 20742** **E-mail:** irb@umd.edu **Telephone: 301-405-0678** *This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.*
Statement of Consent	*Your signature indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You will receive a copy of this signed consent form.* *If you agree to participate, please sign your name below.*
Signature and Date	**NAME OF SUBJECT** **[Please Print]**	

	SIGNATURE OF SUBJECT	
	DATE	

Appendix F: Codebook

Label	Definition	Examples	Sample Response
Predisposition	Students determine whether or not they would like to continue their education beyond high school (Hossler & Gallagher, 1987, p. 209) The decision to go to college instead of taking alternate paths (Hossler et al., 1999, p. 149). Development of occupational and education aspirations as well as the emergence of aspirations to continue education beyond the secondary level (A. F. Cabrera & La Nasa, 2000a, p. 6).	Student: plans to go to college; considers going to college; never seriously considered not going to college (Hossler & Gallagher, 1987, pp. 211-213). Development of college plans (Hossler et al., 1999, p. 28). Student: plans for college (college-track curriculum; extracurricular activities; maintains good academic performance); comes to value a particular occupation and begins to see attending college as crucial in securing his or her occupational goals (A. F. Cabrera & La Nasa, 2000a, p. 7).	*"I knew that if I wanted to go into medicine or if I just wanted a higher education, [I knew] that I would have to go to college"* (Ceja, 2001, p. 102)
Search	Students gather information about institutions of higher education. Searching for the attribute values which characterize the college alternatives. May also entail	Student narrows the geographical range and the quality of the institutions he or she considers. Reliance on high school counselors for advice. Applying for financial aid.	*"We were resourceful enough to visit all the schools I was applying to"* (Contreras-Godfrey, 2009, p. 83).

	learning about and identifying the right attributes to consider. Students formulate the "choice set," the group of institutions to which they will actually apply (Hossler & Gallagher, 1987, p. 209) The process of learning about specific institutions and their characteristics (Hossler et al., 1999, p. 149). The accumulation and assimilation of information necessary to develop the student's short list of institutions. This choice set consists of a group of institutions that the student wants to consider and learn more about before making a matriculation decision. (A. F. Cabrera & La Nasa, 2000a, p. 9).	Student limits the number and types of institutions. Student eliminates institutions (Hossler & Gallagher, 1987, p. 215) Student seeks information about college opportunities. Increased interaction between the student and institutions. Searching both for institutional attributes and for institutions to consider. Making lists of college attributes and colleges (Hossler et al., 1999, p. 149). Student begins to interact actively with potential institutions. Visiting campuses, securing catalogues, and talking to friends about college are some of the activities used in seeking information (A. F. Cabrera & La Nasa, 2000a, p. 9)	
Choice	Deciding which college or university to actually attend (Hossler & Gallagher, 1987, p. 209).	Student compares the academic and social attributes of each college they have applied to and seeks the best value	*"I couldn't apply to USC, and if I was accepted I wasn't able to pay the semester cost of books and tuition*

		with the greatest benefits (Hossler et al., 1999, p. 150). Student estimates the economic and social benefits of attending college, comparing them with those of competing alternatives (A. F. Cabrera & La Nasa, 2000a, p. 12)	*because of my [low-income] financial status"* (P. A. Pérez, 2007;, p. 113).
	Applications are completed and the student chooses a particular institution (Hossler et al., 1999, p. 149). Applying to college and actually enrolling (A. F. Cabrera & La Nasa, 2000a, p. 11).		
Cultural Capital (Perna, 2006)	The system of attributes, such as language skills, cultural knowledge, and mannerisms, that is derived, in part, from one's parents and that defines an individual's class status (p. 111). Cultural knowledge and values about higher education (p. 138).	Believing at an early age that pursuing postsecondary education is a realistic option (p. 115). Cultural knowledge: Student has experience with the college search process or similar situations. Cultural activities, attitudes, and knowledge. Student attends a music, art, or dance class at least once a week. (p. 138) Value of college attainment: May be measured by parental encouragement for college enrollment; parents' expectations for their child's educational attainment (p. 139).	*"It's just always been told to me that I should [go to college]"* (Elías McAllister).

Social Capital (Perna, 2006)	Focuses on social networks and the ways in which social networks and connections are sustained. Acquired through an individual's relationships with others, particularly through membership in social networks and other social structures. A primary function is to enable an individual to gain access to human, cultural, and other forms of capital, as well as institutional resources and support. Resources embedded in social relations and social structures (p. 112). May be manifested through information about college and assistance from school officials with college-choice processes (p. 139).	Interest and assistance from teachers and counselors, Latina/o role models (p. 115). Parental involvement (p. 139). Information about college: May be reflected by, and acquired via, student contact with others about college-related matters. Students may acquire information about college through their involvement with peers in high school activities (p. 140). Assistance with college processes: Assistance in filling out: FAFSA, college application forms and meeting requirements (A. F. Cabrera & Caffrey, 2001).	*"...in high school, they told everyone about it, you know, apply to financial aid and they told us to go on FAFSA on-line" (Elías McAllister).*
School context (Perna, 2006)	Assumptions that an individual's behavior cannot be understood except in terms of the social context in which the behavior occurs. Schools define student college choice through various	Availability of resources; types of resources and structural supports and barriers facilitate or impede student college choice (pp. 117). For example:	*"Our school had a Career Center. I went there a lot" (Elías McAllister).*

	organizational structures. (p. 141)	- Absence of college-related expertise among teachers beyond their personal experiences (p. 141). - Encouraging teachers (p. 141). - Quantity and quality of information provided that counselors provide; counselors encourage and discourage postsecondary options (p. 141). - Amount of time counselors devote to college counseling (p. 142). - High ratios of students to counselors (p. 142). - Involved guidance counseling (p. 142).	

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