The Intricacies of and Relation between Latino Parental Support and College Decision Making

By

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Abstract

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This investigation centered on the relation between perceived parental support for college attendance and students' postsecondary educational aspirations and enrollment intentions. A particular focus of the examination was on the distinction between behavioral-based and non-behavioral-based forms of parental support (labeled interventionist and noninterventionist forms of support, respectively). Three hundred and thirty-seven twelfth grade Latino students who participated in the Puente Program—a research-based college preparation program—were surveyed twice during their senior year in high school. In the first survey, students indicated their own educational aspirations and expectations as well as their perceptions of their parents' aspirations for their education. They also specified their perceptions of parental support along various dimensions. When surveyed again at the culmination of their senior year, students reported on college preparatory actions taken and post-high school plans.

The results of an exploratory factor analysis suggest that perceived parental support for college represents the expression of four distinct underlying dimensions, a more differentiated version of the two types of perceived support initially hypothesized. The factors labeled Broad Intervention and Intervention College Admissions correspond to the anticipated interventionist construct as they encompass survey items that assessed behavioral-based support. The factors labeled Nonintervention Purpose and Nonintervention Encourage are aligned with the anticipated noninterventionist construct as all the items within these subscales referred to non-behavioral motivational input. Investigation of the factors associated with various dimensions of support revealed that low-income, less educated Latino parents were less likely to support their children by interventionist means. Parents born outside of the United States were more likely to provide motivational encouragement intended to convey messages about the purpose of college (i.e., Nonintervention Purpose). Student characteristics in middle school were not significantly related to parenting styles of support provision. Results further indicate that there was a direct significant association between perceptions of overall support and acceptance to a four-year college; parents' propensity to offer Intervention College Admissions support varied significantly across aspiration categories; and parents' propensity to offer Intervention College Admissions support was significantly related to whether or not students were accepted into four-year colleges. Finally, participants in the present study were found to report higher educational plans/expectations and perceived parental aspirations than Latino students from the western region of the United States who participated in the Educational Longitudinal Study of 2002.

Findings from the present study reinforce the connection between parental support and both aspirations and college acceptance. Results suggest that bolstering parent support through the curricula of college preparation programs is central to programmatic success.

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Acknowledgments

This dissertation is dedicated to my grandfather for whom a college education was an unrealized dream. His strong work ethic and unending selflessness are traits I seek to emulate in my life. I love you, Zayde.

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The Intricacies of and Relation between Latino Parental Support and College Decision Making

CHAPTER I

Introduction

It is now widely recognized that the decision to attend college[1] has life-long effects for United States citizens. In addition to enhanced knowledge and cognitive ability, increased education is related to life success in a number of dimensions. For instance, having a college diploma is predictive of elevated salaries, lower rates of unemployment, more job opportunities, better career mobility and job stability, and superior occupational status, often affording a higher quality of life (Bowen, 1977; Hossler, Schmit, & Vesper, 1999; Plank & Jordan, 2001). The present day economy in the United States can best be described as a "knowledge economy" in which the jobs that "support a rewarding style of life" demand educated workers (Tornatzky, Cutler, & Lee, 2002, p. 3). In addition to personal economic gains, studies indicate that individuals holding a bachelor's degree reap social and psychological benefits. College graduates report experiencing higher levels of good health, happiness, self-esteem, and life satisfaction than their counterparts who hold only a high school degree (Bowen, 1977; Institute for Higher Education Policy, 2005; Porter, 2002).

College attendance also has broad implications for society as a whole. The private economic benefits experienced by college graduates have positive public ramifications, such as reduced reliance on government financial assistance, increased tax revenues, greater productivity, and enhanced workforce flexibility. Furthermore, college attendance seems to stimulate concern for the quality of life in American society since college graduates are more likely than their less educated counterparts to become involved in their community by voting, assuming leadership positions, and supporting local educational systems. Higher education corresponds to skill enhancement in key areas, such as technology, science, and education, which is critical for our national progress as an efficient and competitive society (Pomerantz, Moorman, & Litwack, 2007). Finally, research reports a significant inverse relation between years of education and criminal activity (Bowen, 1977; Hossler et al., 1999; Institute for Higher Education Policy, 2005; Porter, 2002).

Even though there are clearly important advantages to achieving higher levels of education, the U.S. Census Bureau reports that only about 30% of adults (25 years or older) have attained at least a bachelor's degree (Stoops, 2004). While it is true that college enrollment among Americans has increased dramatically over the last century, it is also apparent that a significant proportion of young people, many of them academically qualified, still do not make the crucial transition from secondary to postsecondary schooling. The term "talent loss" has been used to describe competent high school graduates who fail to enter college within a few years of their graduation (Plank & Jordan, 2001; Trusty & Niles, 2004). Being that the educational trajectories of some promising students exemplify realized potential, whereas those of others represent lost talent, it is important to delineate the factors that impact students' decisions to continue their education beyond the compulsory level. This is especially true for Latino[2] students who make up the lowest academically performing racial/ethnic group in the United States.

The Educational Landscape of Latino Youth

Between 1999 and 2000, Latinos surpassed African Americans as the largest minority group in the United States, making research on the academic achievement of Latino youth increasingly relevant. Since the early 1980s, the Latino population in the U.S has increased by

approximately 200%, from 14.6 million to 42.7 million, due to both high rates of birth and immigration. It is currently estimated that approximately 40 % of the U.S. Latino population is foreign born (KewalRamani, Golbertson, Fox, & Provasnik, 2007). In addition to being the fastest growing population group, Latinos are also characterized as being the youngest, making up 14% of the public school population in the United States and 47% of the public school population in California (Gándara & Moreno, 2002; Gibson, Gándara, & Koyama, 2004). It is estimated that by the year 2025, one quarter of all school children in the United States will be Latino (Gibson et al., 2004; Ream, 2005).

Latino children in this country face a number of life obstacles that impact their educational outcomes. It is estimated that more than a quarter of the 6.3 million U.S. Latino families with children under the age of 18 are living in poverty. No doubt related, a comparison of levels of parental educational attainment across racial groups reveals Latino children to have the highest percentage of parents without a high school degree. Also relevant, English is a second language for close to seven million school-age Latino students in the United States. Low-income Latino students are also more likely than not to attend low-income, low-performing schools with other minority students. In the 2004-2005 school year, 58% of Latino public school students attended schools where more than 75% of the student body was of minority status (KewalRamani et al., 2007). Through his study on a national sample of American kindergarteners and their respective elementary schools, Crosnoe (2005) found that children of Mexican immigrants were more likely than their counterparts from other racial/ethnic groups with similar socioeconomic backgrounds to be enrolled in disadvantaged schools characterized by greater size, less teacher experience, and a student body with stronger minority representation and a higher poverty rate. Results from Crosnoe's study also point to a strong association between overrepresentation in problematic school contexts and low academic performance and mental health problems (Crosnoe, 2005).

In this country, Latino students are making the transition to postsecondary education at significantly lower rates than youth from other major ethnic groups. Presently, Latinos have the highest percentage of status dropouts (defined as 16-24 year olds who are neither enrolled in school nor have a high school degree) of any ethnic group, as 22% of Latinos compared to 10% of African Americans and 6% of Caucasians were considered status dropouts in 2005. (A more fine grained analysis revealed that a quarter of these Latino status dropouts were of Mexican descent.) Of the Latino students who do achieve a high school diploma, only 25% go on to enroll in some form of postsecondary education between the ages of 18 and 24. While this number has increased by nine percentage points since 1980, it is important to note that across racial and ethnic lines, postsecondary participation rates for 18- to 24-year-old Latinos are among the lowest (KewalRamani et al., 2007). The educational outcomes of Latino youth, especially Mexican American youth, are of particular interest to the state of California where approximately 30% of the population is of Mexican descent. It is estimated that only 60% of Latinos in California complete high school (California Dropout Research Project, 2008).

Study Objectives

My dissertation built upon the fundamental notion that the academic outcomes of Latino youth in this country are in part a reflection of complex relationships between youth and their parents, examining the relation between Latino familial factors and the postsecondary educational aspirations and attainment of low-income Latino youth. Specifically, I investigated the distinct ways in which low-income, Spanish speaking parents with limited educational experiences support their children along the path to college and the differential effects of these

diverse types of support. I reviewed the college decision-making process and Latino cultural schemas regarding educational involvement and support in an effort to help answer why Latino youth make up the lowest academically performing racial/ethnic group in the United States. It is my hope that acquiring a better understanding of the interpersonal factors affecting the college enrollment of Latino youth will help to inform policy aimed at reversing these alarming trends in California and the United States at large.

In an effort to better understand the various types of support that Latino parents provide to their children during the final stages of postsecondary education decision making, I examined the experiences of a sample of Latino high school seniors participating in a California-based college preparation program. Through surveys, the student participants identified distinct types of college support they perceived to be coming from their parents. Student participants also pinpointed their personal academic aspirations as well as their expectations of their actualized academic trajectories. The participants engaged in an end-of-the-year follow-up through which they detailed their academic outcomes and solidified college plans. Through my study, I analyzed the association between the specific forms of perceived parental support and students' aspirations and educational outcomes.

I present this study across four chapters. In this chapter I first provide an overview of the value of a college education and the demographic and educational statistics related to Latino youths' reduced participation in postsecondary education. The present chapter continues with a brief discussion of the relation between educational aspirations and educational outcomes, followed by a comprehensive review of the important role of parental support in shaping educational aspirations, plans, and outcomes. I describe parental support typologies and draw attention to the manner by which Latino parents tend to support their children in education. Walker and colleagues' revised model of parent involvement (Walker, Wilkins, Dallaire, Sandler, & Hoover-Dempsey, 2005) helps me to delineate the structural and familial barriers that shape Latino parent involvement. Chapter I also includes an introduction of my research questions and related hypotheses. In Chapter II, I review the methods used to conduct this study and provide the descriptive information about the participants. Chapter III encompasses an overview of the study's research methods and results. In Chapter IV, I discuss the results from my research questions in relation to the literature reviewed and report on limitations to my study. Finally, Chapter IV concludes with a summary of key findings and implications for practice.

Review of Related Literature

The Relation between Student Educational Aspirations/Expectations and Outcomes

Definitions. The present literature review refers to both "expectations" and "aspirations." Conceptually, these terms are quite disparate. With respect to the realm of education, expectations refer to an assessment or prediction of how far one will go in school, while aspirations refer to hopes concerning educational accomplishments. Researchers can effectively assess educational aspirations by asking what level of schooling is hoped for (Yamamoto & Holloway, 2010). By contrast, expectations can be measured by asking what level of schooling is actually anticipated or thought to be realistically achieved (Carpenter, 2008). Educational expectations reflect more concrete attitudes toward and predictions about education as they have to do with the likelihood of achievement in consideration of structural barriers, student academic performance, and available resources. Glick and White note, "Expectations also tend to be lower than aspirations, which are more frequently interpreted as desires or wishes for the child, as opposed to realistic assessments of what will occur" (2004, p. 282). Holloway and Yamamoto (2010) explain, "To the extent that parental aspirations reflect

the value parents place on education, they are based on parents' personal goals as well as community norms about schooling and its role in promoting professional and personal success" (p. 191). Despite their fundamental differences in meaning, many researchers have employed these terms in an interchangeable fashion. In fact, some researchers even use expectations and plans as a proxy measure of aspirations (Buchman & Dalton, 2002). In the first chapter of my dissertation, I will utilize the same terminology as the authors I cite when describing their studies. When possible, I will identify how the authors measured aspirations or expectations.

Associations. There is strong evidence to suggest that student intentions to attend college are initially formed long before high school (Flint, 1992). In fact, some research indicates that a number of children develop college expectations in elementary school (Murphy, 1981). Studies show that by their first year in high school, the majority of students have developed strong and stable educational and occupational aspirations (Hossler & Stage, 1992). It is during the period of aspiration formation that students begin to perceive a link between their desired future careers and college, and start to view higher education as a vital stepping stone to ensuring the possibility of their occupational goals coming to fruition (Cabrera & La Nasa, 2000; Hossler et al., 1999).

Considerable research has provided evidence for a strong association between educational aspirations formed prior to or at the start of high school and later educational attainment. Investigations of a number of databases show that the correspondence between the formation of educational aspirations at this age, and education actualized generally falls between 0.6 and 0.7 (Sewell, Hauser, & Wolf, 1980). Considering all important variables, Sewell and colleagues indicate that student educational aspirations have the greatest direct influence on schooling obtained. In their 1993 review of the Wisconsin Longitudinal Study, Sewell and Hauser attest to the powerful relation between aspirations and achievement remarking, "We have been convinced that, if we could explain educational aspirations, we would be well on our way to explaining educational achievements" (p. 9).

In order to examine the link between college ambitions in eighth grade and postsecondary matriculation, Somers, Cofer, and VanderPutten (2002) employed data from the National Educational Longitudinal Study of 1988 (NELS:88), the third large-scale study sponsored by National Center for Education Statistics and intended to provide information about transitions into higher education via an examination of surveys, transcripts, and achievement tests for a nationally representative sample of students (Ingels, Curtin, Kaufman, Alt, Chen, & Owings, 2002). In considering a number of relevant factors, Somers et al.'s (2002) work reveals predisposition to attend college to have one of the greatest effects on college enrollment decisions for eighth grade students. The authors found that eighth graders with aspirations of postsecondary education were about 16% more likely to enroll in postsecondary schooling within two years of their graduation from high school as compared to individuals lacking such goals in eighth grade, when controlling for background factors, such as socioeconomic status (SES) and race, as well as factors related to academic track, counselor contact, and student and parent suppositions about college (e.g., opinions about cost, reputation, and admissions standards). (Interestingly enough, variables related to eighth grade academic achievement, such as grades, were not included in this study.) Moreover, students who enrolled in four-year institutions were over 20% more likely to have had college goals in the eighth grade.

Addressing the fulfillment of post-high school plans, Hossler and colleagues (1999) report similar results from their nine-year study of college choice. Through comparing educational aspirations and actualized plans, the authors found that 60% of participant students

actualized the college plans articulated in ninth grade by their high school graduation, suggesting a direct relation between educational plans and outcomes. The authors also report that the higher the educational ambitions in ninth grade, the more likely they were to be actualized; students who had visions of college attendance in ninth grade were the most likely to follow through on their aspirations when compared to students with no college plans or those who were undecided in the ninth grade. In addition, Hossler et al. found a strong correlation between ninth grade plans not to attend college or being undecided about college in ninth grade and dropping out of high school, further attesting to the importance of early goals to continue one's education after high school. Both household income and parents' level of education were found to have direct positive effects on the actualization of college plans.

By gauging the stability of expectations about college over a six-year period, Trusty's work (2000) further points to the consistency and thus, the importance of eighth grade intentions. The author found that despite low achievement on one or more eighth grade tests, those individuals with pre-high school expectations to attend college generally maintained the stability of these outlooks. Seventy-six percent of the participants in Trusty's study still had high expectations six years after eighth grade, as opposed to only 24% who no longer expected to attain a bachelor's degree. Trusty made no mention, however, of how many students in his sample were actually attending college six years after eighth grade. Moreover, SES was reported to have a statistically significant effect on the stability of expectations for both males and females.

Somers et al.'s (2002), Hossler et al.'s (1999), and Trusty's (2000) work suggests that boosting student ambitions before or at the beginning of high school can have long-term effects (Somers et al., 2002). While the formation of aspirations and expectations can be a long process, taking place from early childhood through high school (Paulsen, 1990), it is undoubtedly very important to recognize the predictive effects of early notions. Some researchers suggest that higher aspirations result in higher attainment because they are associated with greater drive, motivation, and effort directed toward the achievement of these goals (Sewell & Hauser, 1975). Others note that ambitions to attend college are most important because of their effect on academic navigation; students who plan to attend college are more likely than their counterparts to choose college-bound curricula and high school programs consistent with their goals (Atanda, 1999). While the exact mechanism explaining the importance of college aspirations is yet to be entirely understood, it is evident that studying the development of educational aspirations is one step towards acquiring a solid understanding of why some students attain college degrees and others do not.

Determining Student Predisposition to Attend College

In light of the strong association between educational aspirations and educational outcomes, educational, psychological, and sociological researchers have extensively studied the period in time when ambitions for higher education are first formulated and developed. While a myriad of variables influence college aspiration formation, the most influential include familial socioeconomic status, parents' educational and income levels, and parental support (Hossler et al., 1999; Hossler & Stage, 1992).

Socioeconomic Status

Socioeconomic status is generally found to exert a strong positive influence on postsecondary educational attainment, goals and plans (Hossler et al., 1999; Hossler & Stage, 1992; Kao & Tienda, 1998; Qian & Blair, 1999). The NELS:88 data provide considerable evidence in support of this effect as student respondents in the lowest socioeconomic quartile of

this nationwide sample were the least likely to express expectations of attaining a bachelor's degree; only 36% of students in the lowest quartile reported expectations of finishing college as opposed to 86% of their peers in the highest quartile who articulated such plans (NCES, 1996). Other research exploring the development of educational aspirations consistently reveals that as one moves up the socioeconomic ladder, there is a pronounced increase in the likelihood of their having high educational goals. This finding holds true across racial/ethnic and gender lines (Smith-Maddox, 2000). In their cross-cultural investigation of influences on college aspirations, Buchmann and Dalton (2002) found that SES had a positive relation with aspirations in all of the 12 countries investigated except Norway. An investigation of the student transition to higher education in Australia found SES to account for 9% of the variance in postsecondary education participation rates (Elsworth, Day, Harworth, & Andrews, 1982). Similarly, Tuttle's (1981) analysis of data obtained from the large-scale High School and Beyond national survey found SES to explain 7% of the variance of postsecondary plans among high school seniors. Tuttle's study, however, yielded evidence in support of an indirect effect of SES on educational ambitions as the relation was found to be mediated by student achievement. In a similar vein, Davies and Kandel (1981) report only indirect effects of SES on aspirations as they found that the influence of SES on aspirations was operating through parents' aspirations.

Parents' education. One component of the SES composite, parents' highest level of education, has been consistently found to be positively related to plans to attend college. Research demonstrates a steady pattern—as parental level of education increases so does student predisposition to attend an institution of higher education (Hossler et al., 1999; Hossler & Stage, 1992). Perhaps this can be explained by the notion that parents who have gone to college understand and are familiar with systems of higher education and are thus better equipped than non-college-educated parents to inform their children of important college-related information, such as admission requirements (Hossler et al., 1999).

In their comparison of the application probabilities of students whose parents had less than a high school education with the application probabilities of students whose parents graduated from college, Manski and Wise (1983) found that students whose parents were college-educated were more than twice as likely as their counterparts to apply to college. Results from Hossler and Stage's (1992) study demonstrate parental education to significantly impact student aspirations, exerting both a direct and an indirect effect on predisposition. Furthermore, in addition to demonstrating a positive correlation between educational plans and highest level of education attained by one's parents, research suggests that parents' educational histories exert a steady influence on the development of college aspirations throughout one's educational career, beginning quite early. Kao and Tienda (1998), through analyzing the schooling goals of students in three grade cohorts (eighth, tenth, and twelfth), came to the conclusion that parents' levels of education are crucial to the formation of educational goals throughout each year of secondary schooling. In addition, Eccles, Vida, and Barber (2004) found mother's education to be a powerful predictor of sixth graders' college plans.

Although the majority of relevant research supports a predictive relation between parents' education and students' predisposition to attend college, some studies do provide opposing evidence, questioning the universality of this association. For instance, Qian and Blair (1999) found parental educational attainment, or "human capital," to have a differential effect on educational aspirations across racial/ethnic groups. In particular, parents' level of education was found to have a strong effect on the educational aspirations of Caucasian high school seniors, but an insignificant effect on those of African American high school seniors. The researchers found

that when educational background was held constant, educational expectations were higher for Latino and African American youth while lower for Asian youth. This indicates that differences in plans held among these racially diverse groups of students was strongly related to the lower parental educational attainment of Latinos and African Americans and the higher parental educational attainment of Asian Americans. Their research also supports the notion that parental status factors more strongly influence Caucasian student expectations than minority student expectations; Caucasian students' plans were found to be significantly influenced by parents' educational attainment and family income (or "financial capital"), which were shown to have no effect on the educational expectations of racial minority youth.

Family income. Unlike findings concerning parental education, those regarding the sole influence of family income (the second component of the SES composite) on predisposition to attend college are inconclusive. While Hossler et al.'s (1999) longitudinal investigation of Indiana high school students revealed a positive effect of parental education on postsecondary aspirations, family income had no impact. Likewise, Hossler and Stage (1992) report no association between the family income and the educational aspirations of their ninth grade participants. Some researchers, on the other hand, do report a positive relation between family income and aspiration variables (Kao & Tienda, 1998; Qian & Blair, 1999).

One conceptual explanation for the link between family income and educational aspirations concerns enhanced material resources. That is, greater financial capital enables parents to provide their children with a more cognitively stimulating home environment and enhanced educational resources. As a result, children from advantaged homes may perform better academically. High achievement may lead to a greater academic self-concept and in turn to the development of higher aspirations. Or, in contrast, it is also possible that low-income adolescent youth are simply aware that college is expensive and that their families have limited economic resources; they may view college as unaffordable and/or feel the need to work immediately after high school in order to help provide for their families. Accordingly, these students may not develop aspirations for higher education because they know that such aspirations will never come to fruition.

In addition to discrepant findings concerning whether or not there is a significant relation between family income and students' educational aspirations, there is also controversy regarding the extent to which race/ethnicity plays a role in this association. Kao and Tienda (1998), for instance, show that family income is strongly associated with the educational ambitions and the preservation of such ambitions between eighth and twelfth grade, when race/ethnicity is held constant. On the other hand, Qian and Blair (1999) describe a racial difference. They found a strong effect of family income on the educational plans of Caucasian students, but found no such effect for Asian, Latino, or African American students.

Parental Support

A thorough review of the research makes clear that there are a number of determinants of students' postsecondary educational plans, aspirations, and expectations. Although socioeconomic status, in general, and parents' education and family income, in particular, have been found to be associated with predisposition to attend an institution of higher education, researchers generally concur that the single most influential factor in determining such predisposition is parental support. Study after study identifies parental support to be the strongest predictor of students' early educational plans (Hossler et al., 1999; Paulsen, 1990).

Definition of parental support. Parent support (involvement is considered an interchangeable term in this context) in children's education can be broadly defined as "parents'

commitment of resources to the academic arena of children's lives" (Pomerantz et al., 2007, p. 374). Diverse lines of research have made distinctions between different forms of parental support. For instance, much of the parent involvement research of the past two decades is based on Epstein's six typologies, which include basic obligations of parenting, communicating with the school, volunteering at the school, promoting learning at home, participating in decision making, and collaborating with the community (Epstein, 1995). Another way to categorize parent support in education is to consider school-based versus home-based involvement (Pomerantz et al., 2007). School-based involvement refers to parental practices that command direct contact with schools, such as participating in general school meetings, serving on the school board or attending school board meetings, attending parent-teacher conferences and initiating contact with teachers, volunteering in the classroom or at the school as a whole, and attending school-wide events. Home-based involvement represents parental practices related to school that take place in another locale. Examples of this type of involvement may be directly related to school, such as assisting children with their homework or course selection, responding to academic tasks (such as test performance or project choice), and discussing academic issues. Home-based involvement, however, also represents activities that are simply intellectual in nature, but not directly related to school, such as reading books with children or taking them to plays, museums, or historical sites (Pomerantz et al., 2007).

Although various lines of theory and research point to a number of ways to define and classify parental support in education, in regards to the college decision-making process and Latino cultural schemas, the most meaningful way to characterize parental support for the present discussion is to consider it in terms of two overlapping dimensions of influence: motivational and proactive (Cabrera & La Nasa, 2000). Expectations and aspirations, and expressions thereof, are the most common forms of noninterventionist or motivational input. Interventionist support refers to direct involvement in matters related to enhancing academic achievement. For instance, communicating with teachers and counselors, helping with homework and course selection, and saving money for college are forms of interventionist support (Flint, 1992; Hossler et al., 1999).

For the purposes of the present study, motivational and proactive forms of support were given the labels noninterventionist and interventionist forms of support, respectively. I feel that these terms are a better representation of the two distinct forms of support as they focus on the presence or absence of a behavioral intervention on the part of the parents. In contrast, the terms motivational and proactive seem to overlap in nature as proactive forms of support often have a motivating effect. Likewise, motivational forms of support, intended to describe communication of high hopes and expectations, can be considered proactive, incorporating an element of planning for the future. It seems to me that the term interventionist better communicates the intended quality of proactive support, which is to set aside resources or to plan.

Interventionist forms of parent support in education tend to be better aligned with the mainstream understanding of involvement than noninterventionist forms of parent support. For instance, when geared towards enhancing parent involvement or support in education, public policy initiatives, intervention programs, and schools tend to focus on promoting interventionist forms of involvement (Pomerantz et al., 2007). Interventionist forms of support tend to be more recognizable and visible and have a more school-centered emphasis than noninterventionist forms of support. That is, teachers and schools notice when parents volunteer, participate in meetings, and help with homework. By contrast, noninterventionist forms of support are more

subtly conveyed to students by parents and often within the privacy of the home. Thus, noninterventionist forms of support and their impact are more likely to go unrecognized.

Although they have distinct definitions, interventionist and noninterventionist forms of parent support likely have a reciprocal relation. For instance, in seeking to pinpoint the factors most strongly linked to parents' saving for college, Hossler and Vesper (1993) found that saving is a function of parents' aspirations for their children. Likewise, Flint (1992) found that as parents' educational aspirations for their children increase, so do the tuition costs of their preferred colleges for their children. The relation between parents' noninterventionist support and interventionist support is intuitive; increased savings, time and energy devoted to contact with teachers, help with homework, and discussions about courses or college selection, may serve to enhance expectations/aspirations, leading to increased involvement, discussions, and commitment to save.

There are a number of milestones to achieve prior to college acceptance and enrollment, ranging from the most general, such as deciding to stay in school and working hard to earn good grades, to the more specific, such as figuring out a means to pay for higher education. Other important milestones along the way include making curriculum choices, signing up for and passing college entrance exams, learning about specific institutions and college life in general, and acquiring, completing, and returning application materials (Tornatzky et al., 2002). Both interventionist and noninterventionist forms of parental support can integrally affect the surpassing of these milestones. Fan, Jarsky, and McDonough (2009) explain, "As it relates to college preparation, parental involvement can range from frequent discussions between parent and child about expectations and hopes for the future to careful financial planning for college and college campus visits as a family" (p. 376).

Studies linking parental support with students' college aspirations/expectations and enrollment. Research shows that parents generally have college plans for their children and that these plans are more often than not consistent with their children's outlook. The National Center for Education Statistics (NCES) (2003) explains that the expectations of students and their parents are well aligned in that the large majority of both dyad entities expect that the student will attend a postsecondary institution. Examining data from the National Households Education Program Surveys of 1999, the NCES found that 94% of sixth through twelfth grade students and 96% of their parents responded "yes" to the query "Do you think you/your child will attend school after high school?" Furthermore, there was much concordance between students and parents; in 91% of the student-parent dyads, both members expressed expectations that the student would attend college.

Hossler and Stage's (1992) examination of a data set collected by the Indiana College Placement and Assessment Center, which involved over 2000 high school students and their parents, yielded consistent associations. Although drawn from the state of Indiana, which is ranked in the bottom quartile of the 50 states with respect to income and educational levels (Hossler et al., 1999), students and parents in Hossler and Stage's sample expressed similar outlooks to each other. While 63% of the students in the total sample aspired to earn at least a bachelor's degree, 68% of their parents had the same expectations of their children.

Overall, the research literature highlights the profound effect that the family has on students' postsecondary educational aspirations. In one study, an investigation of the degree of siblings' educational resemblance identifies the family as very closely linked to educational ambitions. Through their study, Teachman and Paasch (1998) sought to determine the extent to which the variation in educational aspirations occurs between versus within families. The

authors measured aspirations by considering an aspirations-expectations composite—gauging both education expected and the level of education with which one would be satisfied. In their analysis, the authors included measures of educational aspirations, parental education, family income, and academic ability as reported by 421 sibling pairs. The results of their study suggest that close to 75% of the variation in educational aspirations lies between families and only a small fraction of this variation can be explained by socioeconomic factors. Furthermore, the results reveal great likeness between the educational aspirations of sibling pairs, further supporting the strength of the connection between families and the educational aspirations of children. This research clearly speaks to the powerful effect of family socialization (i.e., social-psychological) processes, above and beyond the influence of socioeconomic factors, in shaping educational aspirations.

Along similar lines, Davies and Kandel's 1981 study indicates that parents may be the most influential significant others in the development of aspirations to attend college. Based on reports from 762 adolescent-parent-best friend triads, the data reflected parental educational aspirations for the adolescent, best friend aspirations for the adolescent, adolescent self aspirations, as well as parental aspirations as perceived by the adolescent. In all four categories, aspirations were coded as the highest number of years of schooling aspired to. In their analyses, the authors estimated nonrecursive models in order to account for reciprocal effects of friends and family members on each other. Davies and Kandel's study reveals that parents exert a much stronger influence on the educational aspirations of students than do the best friends of the students. The authors note that the strength of parents' influence increases across the adolescent years, while that of best friends decreases. While Davies and Kandel acknowledge that peers can exert a strong influence especially on adolescent behaviors (such as drug use), they conclude that the role of parents is significantly more robust as related to matters concerning future life ambitions.

Recognizing that college-related decision making is deeply affected by interpersonal factors, especially those relating to the family, a number of correlational studies demonstrate that parental expectations are significantly related to students' educational aspirations. Considerable research reports that students who do not intend to enroll in an institution of higher education lack the necessary motivation resulting from high parental expectations. Drawing on a longitudinal study conducted in Indiana between 1986 and 1994 and including approximately 3,000 students and their parents, Hossler et al. (1999) examined how students make choices about postsecondary education. The authors used surveys and interviews and multivariate statistical techniques to determine the variables that influence the formation of plans to go to college. They considered the different effects of parents and family, background factors, such as parent's education, as well as high school experience factors, such as student grade point average (GPA) and relationships with peers, teachers, and high school counselors. Of the factors investigated, parental encouragement (defined by the authors as parents' expectations, hopes, and dreams for their children) and parental support were shown to be the most influential predictors of postsecondary educational plans when holding all other variables constant. Specifically, student participants who reported having more college-related discussions with their parents and receiving encouragement for college-related plans were more likely to intend to continue their education beyond high school.

Hossler and Stage (1992) analyzed data from approximately 2,500 ninth grade students, also from high schools across Indiana, in order to determine how family and high school experience influence the predisposition to attend college. Although they found significant

associations between ambitions to attend college and students' gender, ethnicity, grades, and involvement in activities, as well as parent's education, parental expectations proved, by far, to have the strongest relation with students' aspirations. The results support Hossler and Stage's theoretical model of predisposition to attend college, which depicts among other associations a direct influence of parents' expectations on students' educational aspirations. (This model was found to explain 36% of the variance in students' educational aspirations for themselves.) As with Hossler et al.'s (1999) research, the sample of participants in this study was not ethnically/racially or geographically diverse as it was comprised solely of individuals from the state of Indiana.

Several studies aimed at examining postsecondary educational aspirations used data from the National Education Longitudinal Study of 1988 (NELS:88), generating findings that are more representative of students throughout the United States. Utilizing data from the 1992 wave of the NELS, Qian and Blair (1999) examined the factors influencing the educational aspirations of over 10,000 high school seniors, by racial and ethnic group. Qian and Blair note that the term "aspirations" in their article refers to "a person's plan or expectation, rather than a wish" (p. 622). They used an ordered-logit regression analysis as a means of measuring the differential impacts of a number of possible determinants of educational expectations for each racial/ethnic group, including gender, standardized test score, religion, family income, parental educational attainment, number of siblings, parental involvement in education, and school location (i.e., urban, suburban, rural). Support, in the form of parents' involvement in students' school activities, was found to significantly affect educational plans for all racial groups except Asian Americans. The authors suspect that this difference could be due to the distinct parenting styles among individuals of Asian descent.

Also utilizing NELS data, Smith-Maddox (2000) limited her investigation of factors affecting educational aspirations (as measured by the question "How far in school do you think you will get?") to the experiences of approximately 3,000 African American youth. In accordance with previous research, her examination makes clear that numerous factors influence the educational aspirations of African Americans, including those that are socioeconomic (i.e., parent's educational level and family poverty level), academic (i.e., math standardized score and ability grouping), and community-related (i.e., extracurricular activities and information network). Similar to other researchers using national data, Smith-Maddox found evidence for a powerful effect of parental expectations and involvement on aspirations in her cross-sectional investigation. Consistent with whole-group analyses, within subgroup regression analyses demonstrated that parents' expectations had the strongest effect on the aspirations of African American eighth graders. With respect to family variables, the extent to which adolescents engaged in regular communication with their parents regarding school and the future was the next best predictor of educational aspirations. This was followed closely by parental involvement, as measured by parents' contact with the school.

While several studies have examined and elucidated the powerful role of parents in shaping the educational aspirations and/or expectations of their children in the United States, few studies have examined whether this relation is true across countries. Buchmann and Dalton's (2002) research served to critique the cross-cultural applicability of findings related to interpersonal influences on educational aspirations. In Buchmann and Dalton's study, aspirations were measured by a question on educational expectations (i.e., "How far do you expect to go in school?") (p. 106). Utilizing data from TIMSS, one of the largest international surveys on educational achievement, the authors determined the effects of peers' and family

members' expectations on a seventh/eighth grade student's likelihood of reporting high educational aspirations in Austria, France, Germany, Greece, Hong Kong, Hungary, Korea, Norway, Spain, Switzerland, Thailand, and the United States, countries with structurally different national educational institutions. Whereas some of these countries have "undifferentiated," or "open," secondary schooling in which academic preparation is stressed for *all* students, others have "differentiated" educational systems, which are more stratified in nature, tracking students into educational versus vocational trajectories. The authors considered the importance of institutional context across the twelve countries in order to assess the cross-cultural relevance of American research concerning educational aspirations. Control variables in this study included gender, parents' education, household resources, and math achievement.

Buchmann and Dalton's logistic regression analysis indicated that, indeed, the strong parental effects found in the United States are replicated in other countries that also have open educational systems that do not differentiate students into vocational or academic schools (i.e., Spain, Norway, Hong Kong, Korea, and Thailand). In Greece, Hungary, and France, countries that encompass less extreme forms of academic tracking in the final years of secondary school, parental attitudes were also found to have a significant effect on student educational aspirations. In contrast, in Switzerland, Germany, and Austria, countries with extreme forms of academic stratification that take effect prior to secondary school, parental attitudes were shown to have weak effects on educational aspirations. The precise reason for the strong inverse relation between highly stratified educational systems and parental influence on aspirations is not fully understood, but it may be that the intense sorting of students conveys the message that educational paths are predetermined and that the parental role is inconsequential. Finally, also noteworthy, like in Davies and Kandel's research (1981), findings from Buchmann and Dalton's study suggest that across educational systems, parents' expectations and attitudes regarding higher education have a stronger effect on student aspirations than do the expectations and attitudes of peers.

In addition to demonstrating the overwhelming impact of parental expectations across race and culture and in comparison with peer attitudes, research also shows that the parental influence on postsecondary educational aspirations begins early. In recognition of the fact that planning and preparation determine the likelihood of college attendance, Eccles et al. (2004) utilized data from 681 sixth graders and their mothers in order to investigate the factors that influence high school performance and college-bound course enrollment decisions and, by consequence, college attendance, well before high school. The hierarchical logistic regression analysis revealed maternal educational valuing, as measured by mother's prediction of anticipated future encouragement to attend college, to be the strongest predictor of sixth graders' college plans (as measured by the question, "People do various things after they finish high school, do you plan to go to a four-year college?"). The next most powerful predictors of the youths' postsecondary plans were student educational values and GPA as well as maternal education level and family income. Furthermore, as predicted, increased certainty about postsecondary school plans in sixth grade was significantly correlated with college attendance at the age of 20. This research indicates the importance of favorable parental attitudes towards postsecondary education in early adolescence as a means of developing youths' educational expectations for themselves, which set them on a path toward a college degree.

In addition to being strong predictors of student expectations to attend college, parental support variables also predict the stability of such expectations. Also using NELS:88 data, Trusty's (2000) study included in its sample over 2,000 eighth grade students with college

aspirations and below median eighth grade reading and mathematics test scores. In examining the stability of these adolescents' postsecondary educational expectations from eighth grade until two years after high school, the author considered the influence of such variables as parental expectations and parents' attendance at school and extracurricular school activities. Other variables in this study included socioeconomic status, racial group membership, access to a computer at home, reading/mathematics achievement, and seeking help from counselors and teachers. Results revealed that while parents' attendance at extracurricular school activities was significantly associated with stable expectations across gender (while other variables were held constant) there were gender differences for the parent expectation variable. Specifically, although mothers' educational expectations had statistically significant effects on the stability of expectations for both males and females when controlling for other independent variables, this effect was much stronger for males than for females. Furthermore, fathers' expectations were not related to the stability of expectations across adolescence, suggesting that mothers' expectations are more influential for eighth graders than those of fathers. Trusty does indicate, however, that fathers' expectations may exert more influence in later adolescence.

Employing NELS:88 data from over 11,000 respondents, Glick and White (2004) explored whether adolescents' expectations mediate the relation between parental expectations and eventual participation in postsecondary education and whether these associations can explain generation status differences in educational attainment. Shedding light on the finding that immigrant youth (first- and second-generation) show a greater propensity to attend an institution of higher education than do their third- or subsequent-generation counterparts, the authors did find generation status differences in parents' and adolescents' expectations. Immigrant parents tended to convey higher educational expectations to their children than did parents of the third or later generation when SES, ethnicity, and family structure were held constant. First-generation adolescents were found to have the highest educational expectations, followed by second-generation adolescents. Taking the previously described research one step further, the authors show that the effect of parental expectations on education actualized operates through adolescents' own educational expectations.

Carpenter (2008) provides evidence challenging several prevailing notions. Carpenter conducted an analysis of a large-scale national database, examining the associations between parent and student expectations and aspirations, and student achievement. Centered on Latino students of immigrant parents, the analysis yielded results divergent from those of Glick and White (2004). Namely, number of years in the United States appeared to have no relation to parental expectations in the sample studied. With this said, however, Latino immigrants were found to have very high expectations for their children—46% of parents in the sample analyzed expected their children to attain a four-year college degree. In addition, the author found that parental aspirations and expectations were not significantly predictive of student achievement (as gauged by mathematics performance in 12^{th} grade), which contests the idea that higher parental expectations are predictive of enhanced student achievement (Sue & Okazaki, 1990). Finally, in contrast to much of the research evidence presented thus far, Carpenter demonstrates that parent and student expectations and aspirations are not universally reflective of one another. Specifically, the author found only a moderately weak association between parent expectations and student expectations for years of schooling the student will attain.

In summary, a number of important studies point to parental support as being centrally important to children's development of educational aspirations and plans during the college decision-making process. Several studies show that students' aspirations and expectations for

their own educational attainment often reflect those of their parents. Much of the research reviewed here also highlights that the powerful role of parents in their children's educational aspiration and planning development exists across gender, race/ethnicity, and country. The research reviewed even shows that the influence of parents on educational plans far surpasses the influence of peers, and that parental support can influence the formation of educational aspirations and plans as early as sixth grade. In contrast, however, some studies do suggest that the link between parent and student expectations is not universally strong. Nonetheless, taken together and in light of the strong link between aspirations and eventual college enrollment, it is clear that parent support is invaluable, helping to guide children to higher educational endeavors.

The Myth

Linking the well-researched significance of parental support with the comparatively low academic achievement of the Latino (specifically Mexican American) population, is the notion that low-income Mexican American children perform poorly in school because their parents do not value education. Valencia and Black (2002) qualify this assertion as a myth entrenched in deficit thinking theory, blaming the victim for the victim's misfortunes rather than examining external sources of responsibility. In the case of Mexican American school failure, deficit thinking relates the poor academic performance of students to problems within the family that lead to cognitive and motivational weaknesses and correlate to suppressed educational success.

The myth that Mexican Americans do not value education has been expressed since the early years of the 20th century (Valencia and Black, 2002). According to Valencia and Black, master's theses in the 1920s and 1930s associated poor academic performance to parents' failure to promote the value of education in their children via academic socialization. In addition to the theses, peer-reviewed academic literature also served to perpetuate the myth. In particular, "Cultural Deprivation" literature as well as "At-risk" literature blamed the poor academic achievement of Mexican Americans to deficient familial and personal characteristics. Furthermore, some historical literature of racial/ethnic groups in the United States regards the noted myth as truth. The historians, in a manner consistent with deficit thinking, explain the Mexican Americans' low high school completion rates as being a result of educational shortcomings rather than due to structural inequalities. Lastly, media and high ranking politicians over the years have played a role in the myth being perpetuated.

Through their 2002 article, Valencia and Black aim to debunk the myth by presenting three forms of evidence which support the notion that Mexican Americans do indeed value education: a historical review of the Mexican American struggle for educational equality, research literature documenting that Mexican American parents do involve themselves in education, and a case study of parents spanning generations who have involved themselves in education. First, the authors note that Mexican Americans have fought for educational opportunities and equalities for years via litigation, advocacy organizations, individual activists, political demonstrations, and legislation. Second, the authors present a case study with results that attest to the fact that education is held in high regard across generations of Mexican Americans. Third, and most relevant to the present discussion, the authors discuss parental involvement scholarly literature which holds that the educational values of Latino parents do not differ from those of Caucasian parents.

Research findings tend to concur that immigrant Latino parents hold education in high regard and that this value is manifested by high aspirations for their children. For instance, through their longitudinal study following 81 Latino parent-student dyads, Goldenberg, Gallimore, Reese, and Garnier (2001) found that parent participants embraced high stable

aspirations for the pursuit of formal postsecondary education unmoved by perceived discrimination. Over 90% of the parent participants presented with unwavering aspirations for their children to attend or complete university level schooling. Similarly, through their study of the relation between parenting and school performance among elementary school children, Okagaki and Frensch (1998) asked Latino parents to identify the "ideal" level of education they wanted their children to reach. The researchers found that their Latino parent participants ideally wanted their children to obtain college degrees. Likewise, the common association among the six Mexican American families studied in Delgado-Gaitan's (1992) ethnographic work was that all the immigrant parents believed education was important and held strong desires for their children's academic success. Findings from a study conducted by the Pew Hispanic Center/Kaiser Family Foundation (2004) indicated that 95% of the nationally representative sample of Latino participants considered it to be "very important" that their children receive a college education. Stevenson, Chen, and Uttal's (1990) study, which assessed the extent to which Latino parents value education relative to parents of other races/ethnicities, yielded consistent, if not more powerful evidence. Specifically, the authors found that their Latino mother participants considered school achievement (as measured by grades) to be more important than did their Caucasian mother participants. Findings from a study on Dominican, Cambodian, and Portuguese parents found that more Dominican parents wanted their children to achieve a college education (98%) than did Cambodian (88%) or Portuguese (85%) parents (García Coll, Akiba, Palacios, Bailey, Silver, DiMartino, & Chin, 2002). Finally, Villenas and Deyhle's (1999) review of seven ethnographic studies on Latino education highlights a strong commitment to education as a common thread among parent participants.

While there is clearly a significant research basis from which to disprove the myth that Latino parents do not value education, the scholarly literature does present mixed evidence regarding Latino parents' expectations for their children relative to other racial/ethnic groups. In their wide-ranging review of over 30 research articles and two meta-analyses, Yamamoto and Holloway (2010) found that while some studies report Latino parents' educational expectations for their children to be lower than the educational expectations of racial/ethnic counterparts, other studies present opposing results. For instance, Suizzo and Stapleton (2007) found that when controlling for income and maternal education level, the educational expectations held by Latino parents superseded those held by European American parents. In contrast, through their analysis of the NELS:88 dataset, Hao and Bonstead-Bruns (1998) found that Korean and Chinese immigrant parents held higher educational expectations for their eighth grade children than did Mexican immigrant parents. Likewise, Okagaki and Frensch (1998) reported that the Latino parents (of fourth and fifth graders) in their study expressed lower expectations for their children than their Asian American and European American participant counterparts. Contrasting still is Carpenter's (2008) large-scale quantitative analysis, which revealed that Latino and non-Latino parent participants had nearly indistinguishable expectations for their children's education regardless of SES.

Conclusions presented by Goldenberg et al. (2001) may help to explain reported inconsistencies in expectations held by Latino parents. In their analysis, Goldenberg et al. found that educational expectations set by Latino parents tended to vacillate over the early schooling years. Suizzo and Stapleton's (2007) finding of higher expectations may be explained in part by the age of their sample. As mentioned earlier, it is not uncommon for expectations to decrease over time. Yamamoto and Holloway (2010) also discuss the possibility that reported differences in parent expectations across racial/ethnic groups could be due to distinctions in socioeconomic

status, the manner in which parent reports are elicited by researchers, and the grouping of Latino parents into one homogenous group rather than into more specific subgroups (e.g., Mexican American). Glick and White (2004) found that generational status also influenced parent expectations. That is, when controlling for race, SES, and other factors, immigrant parents tended to expect significantly higher levels of education for their children than native-born parents. Whatever the explanation, there are clearly inconsistencies in the scholarly literature that should be addressed with further research. Finally, in addition to investigating Latino parents' goals and outlooks for their children's education, it is crucial to examine actions parents take, both conventional and unconventional, in an effort to guide their children towards educational success.

Latino Parent Support of Education

Statistics indicate that low-income immigrant Latino parents do not tend to involve themselves in education by interventionist means to the extent that wealthier, educated, non-Latino parents do. For instance, according to the U.S. Department of Education's 2008 report, 32% of Latino parents volunteered or served on school committees as compared to 54% of non-Latino, Caucasian parents. Likewise, 51% of Latino parents surveyed participated in school fundraising compared to 72% of non-Latino, Caucasian parents. Along with African American parents, the Latino parents surveyed demonstrated the lowest rates of school/class event attendance and participation in school-wide or PTA meetings. While these descriptive statistics are interesting, however, it is important to note that socioeconomic status was not controlled for in the analyses of the report. Other research data indicates that even when controlling for poverty status, however, Latino mothers are less likely to read to their young children than Caucasian or African American mothers. It is also less likely that Latino youngsters from Spanish-speaking homes have access to children's books within their home environment as compared to African American and Caucasian youth as well as Latino children from English-speaking homes (Raikes et al., 2006).

Although there is a wealth of research describing what parent involvement looks like, "parent involvement may easily mean quite different things to different people" (Ascher, 1988, p. 109) and data suggests that mainstream notions of parental involvement are exclusionary of marginalized people, such as low-income Mexican American parents. Tierney and Auerbach (2005) argue that "the traditional practice is White, middle-class parents are often treated as the standard for what counts as involvement" (p. 32). While mainstream involvement in education is considered to be "a means to improving academic achievement," low-income, immigrant Latino parents tend to view "their involvement as a 'means of supporting the total well-being of children'" (Tinkler, 2002, p. 6). Even though low-income Latino parents generally do not participate in their children's education in visible interventionist ways, there is qualitative, ethnographic evidence to support the presence of distinct forms of educational involvement within the walls of Latino homes. This evidence shows that Latino parents maintain a unique role in education, determined by SES, race, cultural beliefs, and child-parent relationships. While not mainstream, atypical forms of involvement are argued to be legitimate types of support that should not go unrecognized, but rather be intimately understood.

Auerbach identified noninterventionist, atypical forms of Latino parental support in her 2006 study which aimed to answer the question: "How do Latino immigrant parents with limited formal education and college knowledge support their children's pathway to college as first-generation students?" Auerbach's ethnographic study focused on seven Latino parents with juniors and seniors in high school who were interviewed and observed extensively. Upon the

study's culmination, the participating parents were labeled "moral supporters," as they generally conveyed their support to their children at home via talking. Trusting that the school would furnish their children with everything else they needed to succeed academically, the parents in Auerbach's study tended to support their youth via *consejos*, or "generic moral messages about the importance of education, including college" (Auerbach, 2006, p. 281). Sometimes *consejos* took the form of cautionary tales in which parents used themselves as reverse role models (i.e., what not to live up to). These talking forms of support reflected the participant parents' limited education and economic resources as well as their cultural values and ways of expressing themselves.

Delgado-Gaitan (1994) also recognized the important role of *consejos*, or cultural narratives, in supporting Latino children's schooling. Through her ethnographic case study of the Estrada family, the scholar defined *consejos* as "nurturing advice" (p. 298) and illustrated that while different from the conventional parent involvement of mainstream society, *consejos* are indeed a form of involvement as they are tools used to instruct children in schooling matters. In Delgado-Gaitan's article, transcribed and coupled with systematic observations, are three conversations with the Estrada family of six (spanning several years). The *consejos* highlighted reveal the Estrada family's educational knowledge, aspirations, and their unity with one another, as well as the parents' sense of empowerment over their children's schooling.

The Estrada family's experiences, Delgado-Gaitan (1994) maintains, are representative of those of many Latino families with immigrant parents. All in all, *consejos* help to reinforce the parent-child bond with respect to schooling and educational concerns. Parents, via *consejos*, encourage solving problems in adaptive ways, cooperating, adhering to authority, and trying one's best academically and behaviorally. In addition, parents convey all expectations to their children with empathy. Delgado-Gaitan highlights the importance of *consejos* through a discussion of how power plays out in the school context. She explains that the relation between school and home is a cultural issue as the school system is bound by conventional practices (e.g., rules, languages, and values) that empower some while limiting others. Immigrant Latino families, often impeded from forming connections with their children's school due to poverty and racial/linguistic differences, can maintain some control over their children's schooling by way of *consejos*.

In addition to pointing to *consejos* and family stories as a means of parental support, Ceja's 2004 study describes how Latino children may interpret and react to this form of involvement. Ceja's study was conducted through the lens of Resiliency Theory, which maintains that individuals cope with and surpass obstacles in their lives by developing a certain healthy, adaptive perspective of their surroundings and experiences. Specifically, Ceja's study points to the students' development of healthy educational aspirations via the interpretation of messages from their parents.

Ceja's qualitative analysis centered on the parental impact on educational aspirations of 20 Chicana high school seniors who were on the UC track, the CSU track, or the community college track. Through individual semi-structured interviews, Chicana students described two main forms of parental influence in their development of college aspirations—direct and indirect educational messages. Direct influence came in the form of clear verbal messages highlighting the importance of furthering one's education, working hard in school, and not giving up. Parents' use of nonconventional approaches (e.g., storytelling, *consejos*, and cautionary tales) also directly motivated the development of educational aspirations. In addition, parents indirectly influenced the development of college aspirations by their own lived examples of the

daily outcomes of a lack of education (i.e., hardship). That is, parents indirectly instilled college aspirations in their daughters by demonstrating the everyday hardships they endured as a result of little to no education. It is the daughters' interpretations of their parents' struggles (i.e., arduous labor, poor wages, inconvenient work schedules, and trouble learning English) that motivated the development of personal college aspirations. In both cases, the importance of education was conveyed by parents' own limited educations and resulting life experiences. Chicana students' reactions to their parents' indirect influences sheds light on their resiliency in that they were able to reinterpret their parents' hardships and struggles as messages of motivation and strength.

Gándara's 1995 study also emphasizes non-mainstream forms of parental support as a means of overcoming barriers to achieve educationally. Through interviewing 50 highly successful Chicano professionals, Gándara examined the factors that contributed to their success despite growing up in low-income households with immigrant parents of limited educational backgrounds. Retrospective analysis revealed a common thread amongst participants; the parents of all participants set high performance standards for their children, modeled a strong work ethic, encouraged literacy (i.e., read in Spanish to their children, furnished their homes with reading materials, etc.), and engaged in discussion of current events with their children. The participants also recollected hearing stories of past family accomplishment. Gándara concluded that all participants had similar experiences in that their parents created a "culture of possibility," conveying to them as youth that they didn't have to live lives similar to those of their parents.

In addition to verbal encouragement as a form of support, research also identifies home and work decisions to be forms of educational support within Latino families. For instance, several subjects in both Gándara's (1995) and Auerbach's (2006) studies benefited from family relocation initiated for the sole purpose of being near better schools. Auerbach also found that the parents in her study tended to free their children of household chores and other responsibilities so that their youth could focus on school work. Along the spectrum of behavioral-based support, these forms of involvement lean more towards the interventionist end than the noninterventionist end of the spectrum. While these forms of support do encompass a behavioral element, however, they do not seem to be entirely interventionist in nature. Unlike mainstream forms of behavioral support which tend to be directly related to education and educational matters, these unique forms of support are only peripherally related to education. Whatever their categorization, these forms of support described by Gándara (1995) and Auerbach (2006), should be acknowledged as important.

Previous research concerning the educational shortfalls of Latinos relied on cultural deficit assumptions which held that Latino parents do not value education or involve themselves in matters related to their children's schooling. Current research contrasts this view holding that many Latino parents do indeed recognize the importance of education and involve themselves in their children's education by way of moral support and verbal encouragement as well as forms of financial sacrifice. Latino educational support may take a different form than it does for many middle-class Caucasian students (i.e., interventionist versus noninterventionist) and can go unrecognized as it is typically conveyed within the home, in Spanish.

It is important to acknowledge distinctions in typologies of parental involvement/support and develop a broader definition of parental support in education that is more encompassing and culturally sensitive (Tierney & Auerbach, 2005). Yamamoto and Holloway (2010) note, "It is critical to have studies which investigate various types of parental involvement contributing to students' academic achievement across diverse ethnic groups" (p. 207). Also fundamental is the

development of an enhanced understanding of the factors that influence parents to become involved in their children's education, particularly within the Latino community. What leads some parents to become more involved and forthcoming with educational support than others?

A Theoretical Model of Parental Involvement

The revised theoretical model of parent involvement developed by Walker et al. (2005), which aims to explain what motivates parents to become involved in their children's education and the influence of their involvement, can be used as a guide to understand the complex nature of the parental influence on the Latino pursuit of higher education. In particular, level one of the revised hierarchical model consists of three overarching constructs that represent the psychological groundwork of parents' involvement behavior. Examination of the theory's base level can shed light on how Latino parents' motivational beliefs, perceptions of invitations for involvement from others, and perceived life context might impede their interventionist type involvement in education (Walker et al., 2005). The parent involvement model explains how environmental conditions in the schools as well as the structures and characteristics of families themselves may serve to increase or decrease parent involvement in education (Tierney, 2002).

Motivational Beliefs

Parental motivational beliefs refer to two psychological underpinnings of parents' involvement behavior: role construction and self-efficacy. Role construction is defined as "parents' beliefs about what they should do in relation to the child's education" (Walker et al., 2005, p. 89). The revised model by Walker and colleagues indicates that the way in which parents see their role in furthering their children's education predicts how involved they become (Tierney, 2002). The literature indicates that Latino parents tend to see themselves as present to provide nurturance and teach morals and good behavior, while considering it to be the school's role to teach academics. In fact, Latino parents generally hold teachers in very high regard and consider interference in their role to be a sign of disrespect: "While teacher viewed parent involvement as a means to improving academic achievement, parents viewed their involvement as a 'means of supporting the total well-being of children'" (Tinkler, 2002).

Latino parents are shown to have a different cultural schema, or definition, of education. Although *educación* resembles its English translation, education, orthographically and phonetically, its significance extends beyond the notion of formal study. In Spanish, *educación* encompasses both moral and behavioral training at home and academic training in the school. The academic and moral aspects of the term *educación* are entirely intertwined (Goldenberg & Gallimore, 1995; Reese, Balzano, Gallimore, & Goldenberg, 1995). Auerbach (2006) explains, "A child who is *bien educado/a* (well-educated, well-mannered) is a good person with correct behavior and a respectful manner (*respeto*) who follows the *buen camino* (right path) in life, including doing well in school" (p. 278). *Consejos* are often used as a means to raise a child who is *bien educado/a* (Villenas & Deyhle, 1999).

With respect to role construction, Latino parents perceive it to be their job to educate their children morally at home, motivating and encouraging their children to do well in school. School success is considered to be impossible without a strong moral upbringing (Auerbach, 2006) as it is this upbringing that is perceived to be the foundation supporting academic achievement (Cooper, Denner, & Lopez, 1999). In her ethnographic portrait, Valdés (1996) illustrates how this role construction influenced the 10 mothers she followed over a three-year period in preparing their children for school. She wrote, "All 10 mothers, however, believed that they had prepared their children well for school. They had taught them to be respectful, and they had taught them to behave. They did not know that other, more "American" mothers had also

taught their children their colors, letters, and numbers" (Valdés, 1996, p. 148). This quote aptly illustrates how the cultural schema of *educación* and the unique role construction of immigrant Latino parents limit interventionist involvement.

The other predictor of involvement described under the motivational belief construct of the theory by Walker and colleagues is parenting self-efficacy for helping one's child achieve in school. Perceived self-efficacy refers to "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). Walker et al. (2005) indicate that self-efficacy "has been identified as a significant influence on people's goal selection, effort, persistence, and ultimate goal accomplishment" (p. 93). Also noteworthy, self-efficacy is domain-specific, meaning that a high sense of self-efficacy in one realm is not indicative of a high sense of self-efficacy in another realm. Self-efficacy is task specific (Bandura, 1997).

The model by Walker and colleagues (2005) indicates that parents' beliefs about the potential impact of their involvement on the educational successes of their children shape their personal involvement behavior (Tierney, 2002). Low-income, immigrant Latino parents tend to have poor college knowledge, a lack of English fluency, and limited educational experience and understanding of the American educational system, likely contributing to low self-efficacy. Personal negative educational experiences may also lead to low self-esteem and anxiety, deterring active forms of involvement (Tinkler, 2002). In their multiethnic study on the relation between parenting and school performance, Okagaki and Frensch (1998) found that Latino parents were less confident than European-American parents in their ability to help their children achieve school success. Stevenson et al. (1990) found that when compared to Caucasian and African American mothers, Latino mothers felt the least capable of providing the necessary assistance to help their children in reading and mathematics. With respect to college specifically, the parents in Auerbach's 2006 study cited poor college knowledge as a main barrier to their active involvement, leading them to gravitate towards a moral support stance. Auerbach wrote, "Given the constraints on their college-going economic, cultural, and social capital, these parents drew on a resource they held in abundance and about which they felt confident: their understanding of and experience in teaching respect and correct behavior to their children while conveying the message that hard work, studying, and college were steps on the "right path" in life" (p. 288).

Perceptions of Invitations

Also explaining why Latino parents involve themselves the way they do in their children's college preparation is parents' perceptions of invitations for involvement from others—the second construct of the primary level of the model by Walker and colleagues (2005). Parental support, the theorists maintain, is guided by general school invitations, specific child invitations, and specific teacher invitations (Walker et al., 2005). Research suggests that low-income, immigrant Latino parents generally feel unwelcomed and uncomfortable in the school environment (Tinkler, 2002). In her ethnographic study, Auerbach (2006) found that "School[s] typically marginalize poor minority parents by failing to accommodate to their needs, validate their culture, or create an inclusive, welcoming climate" (p. 277).

There are several reasons why parents may feel their involvement is unwelcomed or uninvited. First and foremost, general school invitations or specific teacher invitations may be thwarted by the Spanish-English language barrier. That is, a lack of Spanish proficiency among school personnel may impede proper communication of involvement invitations. Cultural differences may also contribute to a sense of schools being inhospitable or uninviting in a

relatively cyclic nature. When Latino parents are not involved in their children's schooling in the mainstream sense, school personnel and teachers tend to buy into the aforementioned myth that Latino parents do not care about their children's education, contributing to bitter sentiments. Perceptions of animosity may add to feelings of being unwelcomed. Additionally, Latino parents' eco-cultural niche often necessitates a reliance on their children as cultural brokers across contexts. Hindered by a lack of English fluency, limited understanding of the American educational system, as well as deprived educational backgrounds, parents have the propensity to take a "supportive bystander role" (Auerbach, 2006) because their high school children are likely more equipped with the tools needed to reach higher education than they are themselves.

The ethnographic studies conducted by Carreón, Drake, and Calabrese Barton (2005) and Lareau and Horvat (1999) highlight how disparate understandings of the meaning of parent involvement among parents and educators and distinct expectations between both parties can precipitate feelings of frustration and alienation, especially for parents. Carreón et al. (2005) presented the stories of three immigrant Latino parents, focusing on the parents' efforts to navigate the educational system and support their children's school success. For all three parents, it was a challenge to support their children in the ways that felt most natural for them (e.g., participating in school events, helping in the classroom, conversations at home, etc.), contributing to feelings of disrespect, confusion, and distance from the school. Likewise, in their ethnographic case study of parent involvement, Lareau and Horvat (1999) found that educators embraced particular types of parent involvement (i.e., positive, supportive, and well-aligned with educator assessments), but rejected forms of involvement out of sync with school expectations. That is, "For a strategy to be successful…it must be legitimated and accepted by the school officials" (Lareau & Horvat, 1999, p. 48). Carreón et al. (2005) argue that we should acknowledge all typologies of parent support, or as they label it, presence in schooling, "regardless of whether that presence is in a formal school space or in more personal, informal spaces, including those created by parents themselves" (p. 466). They further recommend, "for all involved…to allow parents' life experiences and cultural capital to inform school's cultural worlds" (p. 494).

Perceived Life Context

The last construct of the first level of the involvement theory by Walker and colleagues (2005) describes how perceived life context can guide involvement behavior. Perceived life context refers to both perceptions of available time and energy as well as perceived skills and knowledge. Inflexible job schedules, a lack of reliable transportation, and child care dilemmas serve as structural barriers to educational involvement for many low-income families, contributing to perceptions of limited time and energy for involvement (Auerbach, 2006). Tierney (2002) explains, "families have responsibilities to generate economic capital at the expense of generating cultural capital" (p. 594). Teacher meetings and other school events may not be easily accessible or at opportune times for low-income parents with countless logistical constraints.

Low-income Latino parents may also perceive themselves to have inadequate skills and knowledge to prepare their children for higher education. Generally, limited English fluency and a lack of familiarity with academic material (due to low levels of education) can preclude parents' interventionist involvement (Tinkler, 2002). Specifically, low levels of college knowledge and understanding of the educational system also prevent Latino parents from actively helping their children to reach the many milestones that exist on the way to college entry. As Tornatzky et al. (2002) state, "It is not that less-educated parents necessarily have

lower aspirations for their children, but that those aspirations are less likely to be backed by knowledge on how to work the system" (p. 6). Likewise, Cooper et al. (1999) report that many immigrant Latino parents who hold high aspirations for their children find themselves in a predicament when they are unable to provide their children with the guidance necessary to achieve these goals. In support of this theoretical point, ethnographic, qualitative studies have demonstrated that while lower SES parents may indirectly support college going, they lack sufficient knowledge to help guide their children to postsecondary enrollment by interventionist means (Auerbach, 2004).

Many interventionist forms of support are grounded in cultural capital. With respect to college attendance, cultural capital is defined as the knowledge of "the value, importance, and process of securing a college education" (Jun & Colyar, 2002, p. 204). More generally, cultural capital can be defined as the knowledge, skills, and abilities attained by certain groups in society (Villalpando & Solorzano, 2005). Some parents may be less equipped to provide interventionist support to their children due to deficits in cultural capital (Tierney & Auerbach, 2005). For instance, parents of higher socioeconomic status may transmit cultural capital by informing their children of the importance of a college education and its relation to future job success, while working-class students who lack cultural capital related to college choice are dependent upon their guidance counselor for the same information. Tornatzky et al. (2002) sums it up well, explaining, "Not surprisingly, parents' college knowledge—a proxy for high-status cultural capital—figures prominently in how they become involved in college preparation" (p. 42).

In sum, the revised model of parent involvement developed by Walker and colleagues (2005) helps to explain why low-income Latino immigrants may be less likely to support their children on the path to postsecondary educational enrollment in ways that the schools recognize and validate (i.e., interventionist means). According to the model, motivational beliefs regarding one's parenting role and the expected impact of one's efforts, invitations for involvement—both general and specific, and perceptions of available time and energy as well as skills and knowledge, determine whether or not parents become involved in their children's schooling. Ethnographic data suggest that Latino parents do not perceive it to be their role to guide their children through the educational pathway, but rather consider it their duty to nurture and facilitate moral development. Limited college knowledge, understanding of the American educational system, weak academic backgrounds, and lack of English proficiency among Latino immigrants may contribute to weak feeling of self-efficacy in supporting their children's educational advancement. Cultural and linguistic differences tend to generate feelings of discomfort within the school environment for Latino immigrant parents. Finally, it is likely that many low-income Latino immigrants perceive limited availability for interventionist involvement due to job, transportation, and childcare constraints and limited skills and knowledge.

There are clearly a number of explanations for the lack of interventionist support provided by immigrant Latino parents which are well aligned with the revised model by Walker and colleagues (2005). Fan et al. (2009) note, "Lack of college knowledge, structural barriers, language barriers, and unfamiliarity with the U.S. education system make it especially challenging for many Latino parents to help their children prepare for college" (p. 375). With this said, however, Latino parents do have high aspirations for their children and want them to succeed (Goldenberg & Gallimore, 1995). For this reason, Latino parents use alternative motivational forms of support compatible with their view of their role, sense of self-efficacy, perceived skills and knowledge, and available time and energy.

The Current Study

The primary goal of the current study was to explore the relation between distinct types of perceived parental support and the college-related experiences of Latino youth. In order to achieve this objective, the conceptual dimensions underlying the general construct of perceived parental support for Latino students were first examined. Although parent support has been defined in a number of ways in the research literature (Epstein, 1995; Pomerantz et al., 2007), I hypothesized that analysis would reveal two unique dimensions of perceived support well aligned with Cabrera and La Nasa's (2000) categorical descriptions of support. Specifically, I expected to find one type of support characterized by behavioral involvement (i.e., interventionist) and another type characterized by non-behavioral involvement (i.e., noninterventionist). This broad-based conceptualization of parent support distinguished by extent of behavioral input effectively parallels the main distinction between Latino cultural schema related to parent involvement in education (e.g., *consejos*) and the conventional understanding of parent involvement in education in the United States (Tierney & Auerbach, 2005; Tinkler, 2002). I find this simplistic differentiation of parent support for college to be especially intriguing as it begs an answer to the question of whether college acceptance necessitates action-oriented forms of parent support (i.e., tools rooted in college knowledge) or simply parental verbal encouragement.

A second objective of this study was to examine how parent characteristics (i.e., educational background, immigration status, home language, and economic status) related to these two types of parental support. As discussed at the beginning of Chapter I, when comparing levels of parent education across racial groups, Latino children have the highest percentage of parents without a high school degree. Also mentioned previously, nearly seven million Latino students in the United States come from Spanish speaking households and more than 1.5 million U.S. Latino families with children are living in poverty (KewalRamani et al., 2007). I expected to find positive associations between interventionist support and parents' level of English proficiency, education, as well as economic status. Further, I anticipated finding a direct positive relation between immigration status and interventionist support with nonimmigrant parents being more likely to provide interventionist support to their children than immigrant parents. This hypothesis is supported in part by the model of parent involvement developed by Walker and colleagues (2005), which supposes that parent involvement is positively related to feelings of self-efficacy as well as perceptions of skills and knowledge and available time and energy. I hypothesized that parents with lower levels of education and limited English proficiency (as operationalized by immigrant status and home language variables) would feel less efficacious and skilled at helping their children achieve academic success, thus inhibiting their behavioral-based involvement. Furthermore, enhanced English proficiency and educational experiences were presumed related to the cultural capital necessary for the provision of interventionist support. Research shows that low levels of education and poor English language ability serve to impede parental involvement in education (Tinkler, 2002). I hypothesized that parents with greater English proficiency and richer educational histories would have a greater ability to access and understand college knowledge, thus helping their children navigate the American educational system with behavioral forms of support (Auerbach, 2006; Fan et al., 2009; Tornatzky et al., 2002). Additionally, I hypothesized that economic status would be inversely related to interventionist support as lower income parents are likely to work longer hours, have more constrained work schedules and transportation access, thus limiting their social capital and their ability to acquire the cultural capital necessary to behaviorally aid their children on the path

to college. With this said, I hypothesized that there would be no significant relation between parent characteristics and noninterventionist support as the research clearly demonstrates that Spanish dominant, low-income, uneducated Latino parents generally express high aspirations, expectations, and encouragement to their children (Auerbach, 2006; Ceja, 2004; Goldenberg et al., 2001).

A related area of investigation concerned the association of student characteristics with both types of parental support. The focus was on the students' prior level of effort and performance as observed in middle school. There is a well-researched positive relation between parent involvement and student achievement. Some theories state that this association is bidirectional, positing that parental expectations are directly affected by such causal factors as school feedback and, in turn, indirectly affect academic achievement through such mediating variables as parents' achievement supporting behaviors, parents' differential reinforcement, and child's aspirations (Seginer, 1983). In exploring the relation between parental aspirations and expectations and student achievement, Goldenberg et al. (2001) found evidence for a strong direct relation between Latino children's school performance and their parents' expectations for high levels of formal schooling. Thus, it was hypothesized that analysis would reveal a positive association between student effort and achievement in middle school and both types of perceived parental support.

Another aim of this study was to examine the relation of overall parental support, an amalgamate representation of all types of support, to students' college aspirations and college enrollment intention indicators. Considering the wealth of evidence indicating a strong positive association between parental support and students' college aspirations and plans (Buchmann & Dalton, 2002; Eccles et al., 2004; Glick & White, 2004; Hossler et al., 1999; Hossler & Stage, 1992; Paulsen, 1990; Qian & Blair, 1999; Smith-Maddox, 2000), I expected to find that Latino students who felt more supported by their parents overall would be more likely to report aspirations to go to college. Additionally, in light of the strong research-based link between college aspirations and enrollment (Hossler et al., 1999; Sewell et al., 1980; Sewell & Hauser, 1993; Somers et al., 2002; Trusty, 2000), I hypothesized that students who perceived greater levels of parental support (presumed to report higher educational aspirations) would be more likely to report concrete plans and intentions to go to a four-year college as opposed to a two-year college or no college.

Further analysis considered the relative strength of the correlation between both student aspirations and college enrollment intention indicators, and parents' propensity to offer interventionist versus noninterventionist forms of support. I expected to find similar relations between support style and aspirations as I did for support style and college enrollment intention indicators in light of the strong association between educational aspirations and later educational attainment (Hossler et al., 1999; Sewell et al., 1980; Somers et al., 2002). With this said, however, as Tierney and Auerbach note, "We still do not know enough about…precisely what type and degree of parent engagement is most efficacious for certain students under particular conditions" (2005, p. 31), making other outcomes in this area of analysis difficult to predict. There is some evidence that behavior-based support has a stronger positive impact on college attendance than non-behavioral-based support. For instance, in seeking to determine the relative importance of various parent engagement factors with respect to student's transition to college, Horn and Chen (1999) found that parent involvement (by way of conversations about course selection, entrance exam plans, and college applications) had a strong influence on whether students enrolled in some form postsecondary education and a four-year college specifically. On

the other hand, Horn and Chen found parent expectations to play a role in enrollment in postsecondary education, but not to increase the odds of enrollment in a four-year college specifically. In addition to these research findings, ethnographic evidence showing that Latino parents tend to rely on noninterventionist forms of support (Auerbach, 2006; Ceja, 2004; Delgado-Gaitan, 1994) and statistics pointing to Latinos as the lowest performing ethnic group (KewalRamani et al., 2007), lead me to hypothesize that parents' propensity to offer interventionist support would be more strongly related to students' aspirations and college enrollment intention indicators than parents' propensity to offer noninterventionist support. My hypothesis was further influenced by the notion that interventionist forms of support convey guidance as well as the expression of aspirations and expectations through this guidance, while noninterventionist forms of support only convey the latter.

A final objective of this study was to compare the personal plans/expectations and perceived parental aspirations of my study participants with the personal plans/expectations and parental aspirations of a sample of same grade Latino students from the western United States who participated in the Education Longitudinal Study of 2002 (ELS:2002),the fourth large-scale study sponsored by the National Center for Education Statistics (2004) of the United States Department of Education. Like the data from its predecessor, NELS:88, the ELS:2002 data can be used for research purposes as it sheds light on important educational processes and outcomes from a national perspective (Ingels, Pratt, Rogers, Siegel, & Stutts, 2005). It was hoped that a comparison of student plans/expectations and parental aspirations among studies would help to frame the findings of the present study and elucidate data generalizability. With respect to this final study objective, I hypothesized that participants in the present study would report higher educational plans/expectations and perceived parental aspirations than the ELS:2002 participants primarily because participants in the present study were drawn from a rigorous college preparation program called the Puente Program. Horn and Chen's (1999) quantitative analysis revealed that participation in college preparation programs can increase the odds of enrollment in a four-year college by nearly double. Evaluation of the Puente Program in particular has revealed that Puente students are more likely to aspire to attend and eventually attend four-year colleges than non-Puente students (Gándara, 2002), supporting my hypothesis.

In summary, through this dissertation study, I sought to investigate the following research questions (RQ):

RQ1: What conceptual dimensions underlie the general construct of parental support as perceived by Latino students?

RQ2a: How are parent characteristics (i.e., educational background, immigrant status, home language, and economic status) related to parents' style of providing support?

RQ2b: How are student characteristics in middle school (i.e., initial categorization as high effort/high performance, low effort/high performance, high effort/low performance, or low effort/low performance but capable of higher performance) related to parents' style of providing support?

RQ3a: How is overall level of parent support related to student college aspirations and college enrollment intention indicators?

RQ3b: What is the relation between student aspirations and college enrollment intention indicators, and parents' propensity to offer interventionist versus noninterventionist forms of support?

RQ4: How do personal plans/expectations and parental aspirations as perceived by participant seniors compare to personal plans/expectations and parental aspirations as perceived by a sample of same grade Latino students from the western region of the United States (ELS:2002)?

CHAPTER II
Method

Participants

Context. Participants were drawn from the Puente Program, a college preparation program spanning the state of California. The Puente Program, serving a primarily Latino clientele, began at the community college level in 1981 and was adapted to serve high schools in 1993. Since its inception at the high school level, the Puente Program has been incorporated into 33 California secondary schools. At each school site, the program is facilitated by counselors and teachers who report to the Puente administration, housed within the University of California Office of the President in Oakland, California (About Puente, n.d.).

The high school Puente Program is an intense and consistent college preparation program that aims to engender high academic aspirations and a positive attitude towards schooling backed by the knowledge and skills needed to traverse the path to college. A primary goal of Puente is to increase the four-year college attendance rates among its participants (Gándara, 2002). To achieve this goal, the program incorporates three main elements: two years of writing and literature instruction focusing on Latino authors with Puente teachers, college counseling, and mentoring by college-educated adults in the community. The three components were created to work with each other to increase participants' skills, aspirations, and knowledge about college as well as increase support within the school and community as a result of recognizing potential (Gándara & Moreno, 2002). Puente counselors are the main organizing agent at each school site, working with teachers, parents, and students to make sure that students are on track to college enrollment (Gándara & Bial, 2001).

The population targeted by the Puente Program is English speaking, Mexican American eighth graders. Students, selected in eighth grade per the recommendation of middle school teachers and counselors, fit equally into one of four categories: high effort/high performance, low effort/high performance, high effort/low performance, and low effort/low performance but capable of higher performance. In order to be accepted, students must be within three years of their expected reading level and students as well as parents must make a four-year commitment to the program (Gándara & Moreno, 2002). The common thread among all Puente students is a strong desire to go to college as well as supportive parents who agree to attend parent information sessions and workshops (Gándara & Bial, 2001).

A primary strength of the Puente Program, differentiating it from other college preparation programs, is its commitment to parent involvement. The Puente model believes in the healthy collaboration of parents in supporting Latino access to higher education. As such, it incorporates family-centered elements into its curriculum (Tierney, 2002). Puente educates parents about the college enrollment process, conveys to them their important role in their children's educational paths, and explicitly invites them to become active participants in their children's educational decisions.

Puente is considered a culturally specific program as it is formatted to be relevant particularly to low-income Latino youth (Jun & Colyar, 2002). It is also an example of a program built on a cultural wealth as opposed to a cultural deficit perspective. Rather than perceiving culture as neutral or negative, the Puente Program views culture as a critical ingredient for achieving success. Culture is integrated in the program both formally via cultural instruction and informally via parent and mentor involvement (Villalpando & Solorzano, 2005). Through integrating Latino cultural themes in English class and employing bilingual mentors and

counselors of Latino descent, the program seeks to induce feelings of pride in Latino identities, contributing to a sense of empowerment (Gándara & Bial, 2001).

The intended subjects for this study were all 883 twelfth grade students (2009-2010 academic year) in northern and southern California Puente sites. Currently, the Puente Program is integrated in 12 northern California high schools: Andrew Hill High School in San Jose, Everett Alvarez High School in Salinas, Hayward High School in Hayward, James Logan High School in Union City, John F. Kennedy High School in Sacramento, Mt. Eden High School in Hayward, Mt. Pleasant High School in San Jose, Newark-Memorial High School in Newark, Overfelt High School in San Jose, Pittsburg High School in Pittsburg, Tennyson High School in Hayward, and Woodland High School in Woodland. The Puente Program is also integrated in 21 southern California high schools: Anaheim High School in Anaheim, Blair High School in Pasadena, California High School in Whittier, Castle Park High School in Chula Vista, Centennial High School in Corona, Corona High School in Corona, Estancia High School in Costa Mesa, John Muir High School in Pasadena, Katella High School in Anaheim, La Serna High School in Whittier, Magnolia High School in Anaheim, Marshall Fundamental High School in Pasadena, Pasadena High School in Pasadena, Pioneer High School in Whittier, Saddleback High School in Santa Ana, San Fernando High School in San Fernando, Santa Ana Valley High School in Santa Ana, Savanna High School in Anaheim, Southwest High School in San Diego, Theodore Roosevelt Senior High School in Los Angeles, and Whittier High School in Whittier. Due to a later integration of the Puente Program, the following school sites do not yet have a cohort of Puente seniors: Centennial High School, Corona High School, La Serna High School, Mt. Pleasant High School, Newark-Memorial High School, Pioneer High School, and Woodland High School. Thus, study participants were not recruited from these school sites.

Participant Characteristics

Only students for whom there was sufficient data at both time points (i.e., both measures were administered to the student) and who met the screening criteria (i.e., were of Latino descent) were included in this sample (N = 337). (There was data for 440 students at the first time point and for 675 of the 883 graduating Puente seniors at the second time point.) The average age of students in this sample, during testing completed in the spring of 2010, was 17.55 years (SD = .53). Participant ages ranged from 16 to 19 years old.

Demographic variables. About 60% of the sample was female. The majority of the respondents (91.6%) identified themselves as Mexican/Mexican American/Chicano. (This majority of individuals of Mexican descent is reflective of the division of the United States Latino population.) A majority of the respondents received free/reduced-price lunch (68.8%); only a quarter did not receive free/reduced-price lunch (24.6%). Of the 140 students whose GPA was known, GPA ranged from one to four; the mean GPA was 3.02 (SD = .58). Of the 156 students who took Advanced Placement (AP) exams, students reported taking from one to nine tests; the mean number of AP exams taken was 2.66 (SD = 1.73). A third of the respondents, in eighth grade, were classified into the high performance/low effort group (22.8%); another third were categorized into the low performance/high effort group (23.1%). Close to a fifth were grouped into the high performance/high effort category (16.3%). Only a tenth were categorized into the low performance/low effort group (13.5%). Respondents were enrolled in several high schools; the high school with the highest representation was Whittier (13.9%) while the school with the smallest representation was JFK (1.5%). The frequencies for the demographic variables are presented in Table 1.

Table 1
Frequencies and Percentages for the Demographic Variables

Variable	Frequency	Percentage
Gender		
Male	127	38.0
Female	207	62.0
Latino group		
Mexican/Mexican American	307	91.6
Cuban	1	.3
Puerto Rican	1	.3
Central American	21	6.3
South American	3	.9
Not applicable	2	.6
Free/reduced-price lunch received		
No	67	24.6
Yes	187	68.8
Not sure	18	6.6
Student category		
High performance/high motivation	55	21.5
High performance/low motivation	77	30.1
Low performance/high motivation	78	30.5
Low performance/low motivation	46	18.0
High school		
Anaheim	10	3.0
Andrew Hill	26	7.9
Blair IB	12	3.6
California	33	10.0
Estancia	20	6.1
Everett Alvarez	12	3.6
Hayward	13	3.9
James Logan	22	6.7
John F. Kennedy	5	1.5
John Muir	17	5.2
Magnolia	28	8.5
Mt. Eden	21	6.4
Pittsburg	31	9.4
Santa Ana	8	2.4
Tennyson	21	6.4
Roosevelt	5	1.5
Whittier	46	13.9

Home language and parental variables. The home language for more than a third of the respondents was Spanish (30.6%), although about a third spoke either English only (30.6%) or both English and Spanish (31%). The mothers of a majority of the respondents were immigrants to the United States (80.7%). Similarly, the fathers of majority of the respondents were immigrants to the United States (81.4%). Close to half of the respondents' mothers had less than a high school education (44.8%); slightly more than a fifth had their high school

diploma or General Equivalency Diploma (GED) (22.8%). Similarly, close to half of the respondents' fathers had less than a high school education (44.6%); slightly more than a fifth had their high school diploma or GED (24.4%). The frequencies and percentages for the home and parental variables are presented in Tables 2 and 3, respectively.

Table 2

Frequencies and Percentages for the Home Language Variables

Home language	Frequency	Percentage
English only	78	30.6
Spanish only	96	37.6
English and Spanish	79	31.0
Other bilingual/multilingual	2	.8

Table 3

Frequencies and Percentages for the Parental Variables

Variable	Mother		Father	
	Frequency	Percentage	Frequency	Percentage
Education				
Less than high school	151	44.8	150	44.6
High school graduate or GED	77	22.8	82	24.4
Attended two-year college	33	9.8	21	6.2
Completed two-year college	17	5.0	7	2.1
Attended four-year college	8	2.4	8	2.4
Completed four-year college	9	2.7	13	3.9
Master's degree	6	1.8	4	1.2
PhD or other advanced degree	3	.6	0	.0
Do not know	18	5.3	27	8.0
Not applicable	16	4.7	24	7.1
US Immigrant				
Yes	268	80.7	272	81.4
No	52	15.7	21	12.3
Do not know	12	3.6	41	6.3

Procedure

Data was collected from student subjects from October 2009 through February 2010 (Time 1) and from May to June of 2010 (Time 2). Consent, assent, and recruitment occurred during Time 1. No consent, assent, or recruitment was necessary for Time 2 as data collection during Time 2 was handled directly by the Puente Program. Background data on Puente seniors, collected for the Puente Program's administrative purposes, was provided by the Puente Program administration in the summer of 2010, at the end of Time 2.

Consent, assent, and recruitment. Participants for this study were recruited on two levels during Time 1. Prior to recruiting student subjects directly, Puente counselors were recruited to participate in this study. On October 8, 2009, I presented my research goals and general study procedure to northern California Puente counselors and teachers in Berkeley, California at a regional training event held by the Puente Program administration. On October 23, 2009, I presented the same information to southern California Puente counselors and teachers in Riverside, California during their respective training event. At both events, after presenting to the entire group of counselors and teachers, I spoke with counselors and teachers individually to gauge interest in study participation. In the following weeks and months, I reached out to

interested counselors and teachers via telephone and e-mail in order to schedule dates/times for survey administration. (While counselors were my primary point-of-contact at individual school sites, a few school sites offer Puente classes for seniors; at these sites, I corresponded with Puente teachers to schedule survey administration.)

In total, counselors/teachers from 17 of the 33 Puente school sites chose to participate in this study. Counselors/teachers from eight of the nine northern California schools with Puente Program seniors agreed to participate, while counselors/teachers from nine of the 17 southern California schools with Puente Program seniors agreed to participate. The higher participation rate of northern California Puente counselors/teachers compared to southern California Puente counselors/teachers can be explained by my closer proximity to the northern California schools. As the lead investigator, my close proximity to the northern California Puente school sites enabled me to assist northern California counselors/teachers in the data collection process.

Prior to inviting Puente twelfth graders to participate in this dissertation study, Puente counselors or teachers interested in participating in the study sent an informational letter (Appendix A) home to all parents/guardians of the students at their school sites. The letter informed parents/guardians of the study's goals and briefly described the survey to be administered to Puente seniors. The letter explained benefits and risks to participation and listed my contact information as well as that of UC Berkeley's Committee for the Protection of Human Subjects (CPHS) so that parents could ask questions. The letter was in both English and Spanish. Parents had at least one week to contact me or CPHS to ask questions prior to the inception of the study. The negative consent format of the informational letter required parents to contact me in order to opt out of the study. No students were disallowed to participate in this study.

At least one week after parents were sent the informational letter, prospective student participants were invited to participate in the present study during Time 1. I recruited the Puente students at the northern California schools, while the southern California Puente counselors or, in some cases, teachers who agreed to participate, handled the recruitment process themselves. In both cases, the Recruitment Script (Appendix B) was read to guarantee consistency in the communication of key points across all student participants. Specifically, through the Recruitment Script, students were explicitly informed of the goals of the project and the length of time it would take to complete. They were also informed that their participation would not influence either positively or negatively their standing in school. The recruitment process varied from school to school depending on how counselors and teachers met with students. In all northern California school sites, I presented the Recruitment Script in large group format, in a computer lab. The time of day varied depending on when Puente students could conveniently unite together. In some southern California school sites, counselors handled the recruitment process while in other sites, teachers initiated the process. In most cases, students were presented the Recruitment Script in large group format, but there were some cases in which this was not possible and students were invited to participate in the study on an individual level.

After the Recruitment Script was communicated to all students, individual students who were interested in participating in the study were directed to the computer-based survey hosted on www.surveymonkey.com. Students each sat at their own computer. Through an informational letter on the first webpage of the survey, students were informed of the known risks and benefits of participation in the survey and the procedures for assent, ensuring that they were aware of their rights as research subjects prior to beginning the survey. Participants were informed that the survey was entirely voluntary and that their responses would be kept

confidential. Students, like their parents, were also provided with my contact information as well as that of CPHS so as to ask any questions post survey administration.

After reading the informational letter, students were asked to click whether they agreed or disagreed with the statement, "I have read and understood the above informational letter and I agree to participate in this research." Students who agreed with the statement were directed to the first survey question, while those who disagreed were directed to a webpage at the end of the survey, thanking them for their time. Of the 441 students who heard the Recruitment Script and read the informational letter, only one chose not to participate in this study. This high participation rate is likely attributable to the strong relationships facilitated by the Puente program between Puente counselors and students. It is surmised that because the research was supported by the Puente counselor at each site (as evidenced by their efforts/presence in the recruitment process) students felt it was important to participate.

Of the 440 students who participated in the Time 1 survey, 92.1% identified themselves as Latino/Latina. Another 2% identified themselves as Black/African American (n = 8), 5.2% as White/Caucasian (n = 21), 2.7% as Asian (n = 11), 2% as Native Hawaiian or Other Pacific Islander (n = 8), 1.5% as American Indian or Alaska Native (n = 6), and 3.5% as Other (n = 14). Seven of the students who listed themselves in the Other category specified a Latino nationality as their race (e.g., Mexican, Salvadorian, etc.) or a mixed race including Latino in the blank space provided. These seven students and all students who identified themselves as Latino/Latina were included in the data analyses.

Data collection. During Time 1, Puente students were given the Perceived Support and Aspirations Survey (Appendix C). Students were administered the Time 1 survey in the same location and format (e.g., individually versus large group) as they were recruited since administration immediately followed recruitment. The first participant completed the Perceived Support and Aspirations Survey on October 23, 2009, while the final participant completed the survey on February 4, 2010. Time of day of survey completion also ranged significantly depending on the time of day it was most convenient for counselors/teachers to arrange the administration. In general, participants spent anywhere from 10 to 20 minutes to complete the Perceived Support and Aspirations Survey.

In the spring of 2010 (Time 2), the Puente Program administered the Survey: Senior Info Form 2010 by way of Puente counselors (Appendix D). This internet-based survey was disseminated between May and June of 2010. Like the Time 1 survey, the Time 2 survey was administered in various locations and during different times of day, depending on the schedules of individual Puente counselors.

Measures

Perceived Support and Aspirations Survey. The Perceived Support and Aspirations Survey administered during Time 1 assesses both the extent to which students feel supported by their parents and the degree to which they aspire to go to college. The instrument, consisting of 20 questions total (a couple of which having numerous sub-items) is clearly divided into separately titled sections, making its objectives clear to the students. The first section of the survey, following the information letter and the assent for participation, is labeled "Confidential Information" and asks respondents to indicate their name, date of birth, and school of attendance. The second section, labeled "Aspirations and Planning Questions," examines students' personal educational plans/expectations as well as their perceptions of their parents' educational goals for them. The third section, titled "Perceived Support Questions," gauges the extent to which students feel supported by their parents to go to college. The fourth section, labeled "General

Questions," asks general questions (e.g., ethnicity, gender, number of siblings, and highest educational level achieved by parents). The final section, titled "Hopes and Dreams Question," asks students to indicate how much education they would pursue in an ideal world so as to gauge personal aspirations.

All eight questions in the second section of the Perceived Support and Aspirations Survey were selected from the Educational Longitudinal Study of 2002's (ELS:2002) First Follow-up Student Questionnaire so as to provide a direct comparison of the experiences and perceptions of the present study's respondents to those of a nationally representative sample of students in relation to key issues of personal plans/expectations and perceived parental aspirations. (The First Follow-Up questionnaire was administered in 2004 when the majority of ELS:2002 respondents were in twelfth grade.) In addition to reflecting the generalizability of findings (through comparing responses from the present sample with those from a national sample), employing ELS:2002 questions in the Perceived Support and Aspirations Survey made sense for other reasons. First, although the present study is much shorter in duration, it is longitudinal in nature as is the ELS:2002. Furthermore, ELS:2002 follows a nationally representative cohort, so the questions asked by the ELS:2002 surveys were designed to be pertinent to students of all races/ethnicities across the United States, including Latino youth. The ELS:2002 study also looks at the relevance of home background and parents' aspirations to student transitions after high school, which is clearly a central concern of the present study. Questions from the second section of the Perceived Support and Aspirations Survey and their corresponding ELS:2002 variables are presented in Table 4.

Table 4

Corresponding questions from Perceived Support and Aspirations Survey and ELS:2002 Student First Follow-Up Questionnaire

Perceived Support and Aspirations Survey question	ELS:2002 variable
#5 As things stand now, how far in school do you think you will get?	F1S42
#6 How far in school do you think your mother (or female guardian) wants you to go?	F1S43A
#7How far in school do you think your father (or male guardian) wants you to go?	F1S43B
#8What do the following people think is the most important thing for you to do right after high school? --------Your mother (or female guardian)	F1S44A
#8What do the following people think is the most important thing for you to do right after high school? --------Your father (or male guardian)	F1S44B
#9Do you plan to go on to school right after high school?	F1S45
#10 Which of the following are reasons why you have decided NOT to continue your education right after high school?	F1S46
#11 Do you plan to continue your education at some time in the future?	F1S47
#12 Which of the following will you most likely attend?	F1S49

For the third section of the Perceived Support and Aspirations Survey, I designed 28 questions to assess students' perceptions of parental support for college decision making, acceptance, and enrollment. The questions were intended to reflect the aforementioned milestones one must surpass prior to college acceptance and enrollment, including but not limited to: thinking about education beyond high school, working hard to earn good grades,

enrolling in honors and AP classes, making university-approved curriculum choices, taking college entrance exams, selecting colleges of interest, completing and turning in college applications, and determining a plan for financial aid or another means for tuition payment. Some of the questions were also intended to reflect Latino cultural schemas in relation to education (e.g., pursuing a college education to have a better life). For half of the questions, respondents were instructed to rate the frequency that their parents provided specified types of support on a four-point scale ranging from Never to Often (e.g., "My parents encourage me to have educational goals beyond high school"). For the second half of the support-related questions, respondents were instructed to rate the extent to which they agreed with support-related statements, on a four-point scale ranging from Strongly Disagree to Strongly Agree (e.g., "My parents are willing to help me fill out college applications"). In addition to encompassing distinct formats, half of the questions were developed to reflect interventionist-type behavioral-based support (e.g., arranging college visits, telling students which tests to take and when, helping students apply for financial aid, etc.), while the other half was developed to reflect noninterventionist-type support devoid of behavioral input (i.e., feelings and ideas communicated to promote a college education via only verbal means).

The fourth section of the Perceived Support and Aspirations Survey consists of general questions pertaining to gender, race/ethnicity, parents' country of origin, parents' educational backgrounds, and number of older siblings who have gone to college. When possible, the phrasing of these items replicated the phrasing of similar items from the ELS:2002 Base Year Student Questionnaire. The data attained from these questions was intended to serve as control variables.

Finally, as mentioned above, the last section of the Perceived Support and Aspirations Survey consists of only one question. The question, "In an ideal world, how far in school would you want to go?," serves to assess student aspirations as opposed to plans/expectations, which were assessed by questions in the second section of the survey.

Survey: Senior Info Form 2010. The follow-up survey administered during Time 2 consists of 105 questions and is broken up into four sections. The first section encompasses only one item, identifying school of attendance. The second section has questions about demographics (e.g., gender, ethnicity, country of birth, etc.). The third section inquires about future means of contact. The last section consists of the "Survey Questions," which focus on students' experiences in the Puente Program, opinions about the program's effectiveness, feelings about family support for college, college admissions-related activities, intended college plans, and future support needed to ensure a smooth transition to college. Of particular relevance to the present study, select questions in the final section of the survey ask students to identify where/if they applied to college, where/if they were accepted to college, and where/if they plan to attend college. Some items also gauge college enrollment intentions by asking students to report whether they had taken the SAT or ACT and/or AP tests.

Although the survey was designed primarily by the Puente Program, I did collaborate on select item phrasing as well as the inclusion of particular ELS:2002 items related to parent support and reasons for college choice. Since the Survey: Senior Info Form 2010 was a mandatory assignment for all Puente seniors, it captured a larger group of students than the Perceived Support and Aspirations Survey. For this reason, questions similar to those asked during Time 1 were asked again at Time 2 (e.g., highest level of education of parents).

CHAPTER III
Results

Data analyses for this dissertation were carried out using the statistical computer software, SPSS 16. Select descriptive statistics and results relative to each of the Research Questions (RQ) and their corresponding hypotheses are presented in this chapter.

RQ1: What conceptual dimensions underlie the general construct of parental support as perceived by Latino students?

Procedure. To determine the number of conceptual dimensions underlying perceived support for Latino Puente students, an exploratory factor analysis (EFA) was conducted. Since the purpose of the EFA was to determine the number of dimensions underlying perceived support (and not data reduction), Principal Axis Factoring was used to extract the factors. The following criteria were used to determine the number of factors to retain: the Kaiser criterion of retaining factors with an eigenvalue of one or more, and visually inspecting and locating the break in the Cattell scree plot. Since it was anticipated that the factors would be correlated, the resulting factors were then rotated using a non-orthogonal Oblimin procedure.

Results. Five factors were extracted. The percentage of variance accounted for by the five factors was 59.30. The correlations between the factors are displayed in Table 5 while the item loadings from the pattern matrix are shown in Table 6. The list of items measuring each factor is shown in Table 7. As can be gleaned from Table 7, the first factor pertained to behavioral-based support for college focusing on the early steps of college preparation that are broad in nature. As such, this factor was labeled the Broad Intervention factor. The second factor consisted of nonintervention items describing various purposes for obtaining a college degree; thus, this factor was labeled the Nonintervention Purpose factor. The third factor included specific forms of behavioral-based support related to the final stages of the college preparation process. Therefore, this factor was labeled the Intervention College Admissions factor. Since one item (i.e., item 14c) did not appear to be specific to the college admissions process, it was dropped from subsequent analyses. The fourth factor consisted of nonintervention items describing encouragement and support for pursuing a college education. Accordingly, this factor was labeled the Nonintervention Encourage factor. Items that loaded onto the fifth factor either had very low values (e.g., item 14h had a loading of .36) or cross-loaded onto other factors (e.g., item 14a loaded onto both the second and third factors). Thus, this fifth factor was dropped from subsequent analyses. The following items were dropped because they either had low (i.e., below .40) factor loadings or cross-loaded onto other factors: 13j, 13l, 14a, 14h, and 14n.

Table 5

Factor Correlation Matrix

Factor	1	2	3	4
1				
2	.19			
3	.59	.38		
4	-.19	-.02	-.07	
5	.30	.48	.34	.00

Table 6
Pattern Matrix for Parental Style of Support

Item	1	2	3	4	5
13a	.055	.188	.086	-.628	-.120
13b	.651	-.064	.102	.066	-.098
13c	.632	.006	-.031	-.050	.047
13d	.043	.059	.188	-.660	.046
13e	.598	.075	.202	.165	-.171
13f	.039	.225	.041	-.591	-.033
13g	.682	-.033	.045	-.114	-.027
13h	.718	.104	-.093	-.033	.126
13i	.766	.041	-.006	.018	-.111
13j	.291	.143	.171	-.288	-.113
13k	.470	.027	.083	-.254	.106
13l	.282	.011	-.015	-.168	.241
13m	.454	-.139	.221	-.199	.168
13n	.682	-.022	.177	.054	-.038
14a	-.059	.358	.221	.046	.245
14b	-.058	.016	.842	-.073	-.027
14c	-.003	-.019	.569	-.223	.111
14d	.045	.528	-.082	-.073	.101
14e	.125	-.050	.711	.095	-.027
14f	.041	.554	-.044	-.056	.055
14g	.025	-.041	.743	-.006	.009
14h	-.070	.129	.044	.065	.362
14i	.032	.031	.577	-.120	.068
14j	.005	.741	-.016	.085	.200
14k	.198	.086	.588	.074	-.047
14l	.000	.587	.159	-.250	-.202
14m	.033	.749	.039	-.177	-.260
14n	.138	.103	.087	-.145	.194

Table 7
List of Items Measuring Each Factor

Factor		Item
1 Broad Intervention	13b	My parents contact colleges for information.
	13c	My parents contact my school counselor and/or teachers to get advice about college for me.
	13e	My parents review publications, materials, or internet pages about specific colleges.
	13g	My parents and I talk about which high school courses I should take to get into college.
	13h	My parents tell me that I should take AP exams.
	13i	My parents and I discuss plans and preparation for the SAT and/or ACT tests.
	13k	My parents encourage me to take advantages of the help I receive from the Puente Program.
	13m	When I am struggling in class, my parents offer to help me whenever they can by sitting down with me or finding me help.
	13n	My parents help me access college applications.
2 Nonintervention Purpose	14d	My parents want me to go to college because they did not have the opportunity to do so.
	14f	My parents feel that you have to go to college to be successful in this country.
	14j	My parents want me to go to college so that I can make more money and/or have a better job than they do.
	14l	My parents think it is important to go to college.
	14m	My parents want me to go to college to have a better life.
3 Intervention College Admissions	14b	My parents are willing to help me fill out college applications.
	14e	My parents are willing to edit my college application essays.
	14g	My parents are willing to help me prepare for college interviews.
	14i	My parents are willing to help me fill out financial aid forms.
	14k	My parents are willing to arrange campus visits.
4 Nonintervention Encourage	13a	My parents encourage me to have educational goals beyond high school.
	13d	My parents tell me that I can be successful in college.
	13f	My parents tell me that I should study and work hard so that I can get into college.

Assessment of reliability. The internal consistency of each of the measures was assessed via Cronbach's alpha. The alphas for each of the measures are presented in Table 8. Alphas ranged from .77 to .89. Thus, all measures had acceptable alpha values (i.e., $\alpha = .70$) according to Nunnally & Bernstein (1994).

Table 8

Coefficient Alphas for the Study Measures

Measure	Case N	Item N	Alpha
Interventionist factors			
Broad, general steps	320	9	.89
College admission steps	327	6	.87
Noninterventionist factors			
Purpose of college	328	5	.77
Encouragement	333	3	.82

RQ2a: How are parent characteristics (i.e., educational background, immigrant status, home language, economic status) related to parents' style of providing support?

Procedure. In order to determine whether parenting styles varied significantly across parent characteristic categories (i.e., level of education, immigration status, home language, and economic status) analysis of variance (ANOVA) procedures were conducted. Post-hoc Tukey tests were conducted to test which group comparisons were statistically significant.

Maternal level of education. Since some of the categories of the maternal level of education variable had very few cases, the variable was redefined into a variable with five categories. The fifth through eighth levels were collapsed into a single category (renamed as Four-year college or more). The ninth and tenth levels were also collapsed into a single category (renamed as Other). The univariate findings, summarized in Table 9, indicate that Broad Intervention factor scores varied significantly across levels of education (F (4,332) = 6.94, p = .000). Post-hoc Tukey test findings reveal that respondents whose mothers did not complete high school (M = 1.98, SD = .69) had significantly lower Broad Intervention scores than respondents whose mothers had their high school diploma or GED (M = 2.33, SD = .83; p = .006), respondents whose mothers attended or completed a two-year college (M = 2.30, SD = .75; p = .049), and respondents whose mothers had attended/completed a four-year college or completed a four-year college and graduate school (M = 2.61, SD = .64; p = .001). In addition, respondents who did not know what level of education their mothers had attained or for whom the question was not applicable (M = 1.95, SD = .69) had significantly lower Broad Intervention scores than respondents whose mothers attended/completed a four-year college or completed a four-year college and graduate school (p = .006). Univariate findings further reveal that Intervention College Admissions factor scores varied significantly across levels of education (F (4,332) = 3.98, p = .004). Post-hoc Tukey test findings reveal that respondents whose mothers did not complete high school (M = 2.82, SD = .69) had significantly lower Intervention College Admissions factor scores than respondents whose mothers had attended/completed a four-year college or completed a four-year college and graduate school (M = 3.37, SD = .44; p = .002).

Table 9

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Levels of Maternal Education

Level of Education	N	Mean	SD	F	Sig.
Broad Intervention				6.94	.000
Other	34	1.95	.69		
Less than high school	151	1.98_a	.69		
High school graduate or GED	77	2.33_b	.83		
Attend/complete two-year college	50	2.30_b	.75		
Four-year college or more	25	2.61_b	.64		
Intervention College Admissions				3.98	.004
Other	34	2.91	.74		
Less than high school	151	2.82_a	.69		
High school graduate or GED	77	2.95	.62		
Attend/complete two-year college	50	3.03	.69		
Four-year college or more	25	3.37_b	.44		
Nonintervention Purpose				2.11	.080
Other	34	3.67	.49		
Less than high school	151	3.74	.41		
High school graduate or GED	77	3.69	.36		
Attend/complete two-year college	50	3.60	.42		
Four-year college or more	25	3.61	.44		
Nonintervention Encourage				1.47	.210
Other	34	3.58	.67		
Less than high school	151	3.64	.65		
High school graduate or GED	77	3.75	.41		
Attend/complete two-year college	50	3.75	.46		
Four-year college or more	25	3.89	.23		

Note. Means with different subscripts differ significantly at $p < .05$ in the Tukey honestly significant difference comparison.

Paternal level of education. Since some of the categories of the paternal level of education variable had very few cases, the variable was redefined into a variable with five categories. The fifth through eighth levels were collapsed into a single category (renamed as Four-year college or more). The ninth and tenth levels were also collapsed into a single category (renamed as Other). The univariate findings summarized in Table 10 indicate that Broad Intervention factor scores varied significantly across levels of education (F (4,331) = 2.85, p = .024). Post-hoc Tukey test findings reveal that respondents who did not know the highest level of education their fathers had attained or for whom the question was not applicable (M = 1.94, SD = .64) had significantly lower Broad Intervention scores than respondents whose fathers had their high school diploma or GED (M = 2.30, SD = .77; p = .047). Univariate findings further reveal that Intervention College Admissions factor scores varied significantly across levels of education (F (4,331) = 3.19, p = .014). Post-hoc Tukey test findings, however, did not yield any statistically significant group comparisons.

Table 10

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Levels of Paternal Education

Level of Education	N	Mean	SD	F	Sig.
Broad Intervention				2.85	.024
Other	51	1.94 $_a$	.64		
Less than high school	150	2.08	.76		
High school graduate or GED	82	2.30$_a$	.77		
Attend/complete two-year college	28	2.23	.77		
Four-year college or more	25	2.37	.77		
Intervention College Admissions				3.19	.014
Other	51	2.86	.69		
Less than high school	150	2.82	.69		
High school graduate or GED	82	3.02	.63		
Attend/complete two-year college	28	3.18	.80		
Four-year college or more	25	3.15	.69		
Nonintervention Purpose				2.34	.055
Other	51	3.71	.47		
Less than high school	150	3.75	.36		
High school graduate or GED	82	3.59	.49		
Attend/complete two-year college	28	3.68	.30		
Four-year college or more	25	3.63	.37		
Nonintervention Encourage				.57	.684
Other	51	3.69	.62		
Less than high school	150	3.66	.60		
High school graduate or GED	82	3.70	.52		
Attend/complete two-year college	28	3.79	.46		
Four-year college or more	25	3.80	.36		

Note. Means with the same subscript are significantly different at $p < .05$ in the Tukey honestly significant difference comparison.

Maternal immigration status. The univariate findings summarized in Table 11 indicate that Nonintervention Purpose factor scores varied significantly across status groups (F (1,318) = 15.26, p = .000). Respondents whose mothers were born in the United States (M = 3.50, SD = .48) had significantly lower scores than respondents whose mothers were born elsewhere (M = 3.73, SD = .39).

Paternal immigration status. The univariate findings summarized in Table 12 indicate that Intervention College Admissions scores differed significantly across status groups (F (1,311) = 4.42, p = .036). Respondents whose fathers were born in the United States (M = 3.13, SD = .64) had significantly higher scores than respondents whose fathers were born elsewhere (M = 2.90, SD = .68). In addition, Nonintervention Purpose factor scores varied significantly across status groups (F (1,311) = 16.66, p = .000). Respondents whose fathers were born in the United States (M = 3.48, SD = .44) had significantly lower scores than respondents whose fathers were born elsewhere (M = 3.73, SD = .39).

Table 11

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Maternal Immigration Status Groups

United States Immigrant	N	Mean	SD	F	Sig.
Broad Intervention				2.88	.091
No	268	2.12	.75		
Yes	52	2.31	.79		
Intervention College Admissions				3.32	.069
No	268	2.89	.69		
Yes	52	3.08	.64		
Nonintervention Purpose				15.26	.000
No	268	3.73	.39		
Yes	52	3.50	.48		
Nonintervention Encourage				.53	.468
No	268	3.69	.57		
Yes	52	3.66	.54		

Table 12

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Paternal Immigration Status Groups

United States Immigrant	N	Mean	SD	F	Sig.
Broad Intervention				.62	.433
No	272	2.14	.75		
Yes	41	2.24	.82		
Intervention College Admissions				4.42	.036
No	272	2.90	.68		
Yes	41	3.13	.34		
Nonintervention Purpose				16.66	.000
No	272	3.73	.39		
Yes	41	3.48	.44		
Nonintervention Encourage				.82	.367
No	272	3.71	.56		
Yes	41	3.65	.55		

Home language. The univariate findings summarized in Table 13 reveal that home language did not have significant univariate effects on parenting styles of providing support.

Table 13

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Home Language Groups

Home Language	N	Mean	SD	F	Sig.
Broad Intervention				.06	.945
English only	78	2.16	.74		
Spanish only	96	2.14	.81		
Both English and Spanish	81	2.13	.74		
Intervention College Admissions				.61	.542
English only	78	2.95	.70		
Spanish only	96	2.84	.72		
Both English and Spanish	81	2.92	.67		
Nonintervention Purpose				.06	.942
English only	78	3.71	.39		
Spanish only	96	3.69	.42		
Both English and Spanish	81	3.71	.35		
Nonintervention Encourage				1.44	.239
English only	78	3.71	.55		
Spanish only	96	3.64	.57		
Both English and Spanish	81	3.75	.55		

Economic status. Economic status was measured by free/reduced-price lunch status; free/reduced-price lunch was considered a proxy for low economic status, while no free/reduced-price lunch was considered a proxy for moderate to high economic status. The univariate findings summarized in Table 14 indicate that Broad Intervention scores differed significantly across economic status (F (1,252) = 5.19, p = .023). Respondents with higher status (M = 2.31, SD = .78) had significantly higher scores than respondents lower in status (M = 2.06, SD = .74).

Table 14

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Economic Status Groups

Economic Status	N	Mean	SD	F	Sig.
Broad Intervention				5.19	.023
No free/reduced-price lunch	67	2.36	.78		
Free/reduced-price lunch	187	2.06	.74		
Intervention College Admissions				.74	.391
No free /reduced-price lunch	67	2.97	.71		
Free/reduced-price lunch	187	2.89	.67		
Nonintervention Purpose				1.49	.223
No free/reduced-price lunch	67	3.64	.44		
Free/reduced-price lunch	187	3.71	.42		
Nonintervention Encourage				.01	.937
No free/reduced-price lunch	67	3.70	.51		
Free/reduced-price lunch	187	3.69	.59		

RQ2b: How are student characteristics in middle school (i.e., initial categorization as high effort/high performance, low effort/high performance, high effort/low performance, or low effort/low performance but capable of higher performance) related to parents' style of providing support?

Procedure. To determine whether parenting styles varied significantly across student categories, an analysis of variance (ANOVA) procedure was conducted. Post-hoc Tukey tests were conducted to test which group comparisons were statistically significant.

Results. The findings summarized in Table 15 reveal that student characteristics did not have significant univariate effects on parenting styles of providing support.

Table 15

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Student Performance and Motivation Categories

Student Categories	N	Mean	SD	F	Sig.
Broad Intervention				.73	.535
High performance/high motivation	55	2.05	.81		
High performance/low motivation	77	2.23	.75		
Low performance/high motivation	78	2.12	.75		
Low performance/low motivation	46	2.17	.69		
Intervention College Admissions				.43	.731
High performance/high motivation	55	2.88	.70		
High performance/low motivation	77	2.99	.74		
Low performance/high motivation	78	2.93	.65		
Low performance/low motivation	46	2.86	.62		
Nonintervention Purpose				1.52	.210
High performance/high motivation	55	3.72	.42		
High performance/low motivation	77	3.70	.41		
Low performance/high motivation	78	3.60	.45		
Low performance/low motivation	46	3.74	.33		
Nonintervention Encourage				1.34	.264
High performance/high motivation	55	3.54	.74		
High performance/low motivation	77	3.72	.47		
Low performance/high motivation	78	3.64	.63		
Low performance/low motivation	46	3.79	.40		

RQ3a: How is overall level of parent support related to student college aspirations and college enrollment intention indicators?

Student aspirations descriptive statistics. More than a third of the respondents (38%) indicated that they would like to graduate from college in response to the question: "In an ideal world, how far in school would you want to go?" More than a fifth of the respondents reported that they would like to obtain a master's degree (22.3%), while less than a fifth stated that they would like to obtain a doctorate or other advanced degree (16.9%). The respondents' perceptions of their mother's aspirations for them were similar. That is, a third of the respondents reported that their mothers wanted them to graduate from college (33.6%), less than a fifth stated that their mothers wanted them to obtain a master's degree (18.8%), and a third indicated that their mothers wanted them to obtain a doctorate or other advanced degree (30.4%). The respondents' perceptions of their fathers' aspirations for them were similar. Close to a third of the respondents reported that their fathers wanted them to graduate from college (28.2%), less

than a fifth stated that their fathers wanted them to obtain a master's degree (13.9%), and close to a third indicated that their fathers wanted them to obtain a doctorate or other advanced degree (26.7%). The frequencies and percentages for the respondents' personal aspirations and perceptions of their parents' aspirations for them are displayed in Table 16.

Table 16

Frequencies and Percentages for the Aspiration Variables

Aspiration	Self		Perceived Mother		Perceived Father	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Less than high school	1	.3	9	2.7	11	3.3
GED/other equivalent	0	.0	1	.3	0	.0
High school graduate	2	.6	4	1.2	5	1.5
Attend/complete two-year college	47	13.9	14	4.2	17	5.0
Attend four-year college	11	3.3	9	2.7	10	3.0
Complete four-year college	128	38.0	113	33.5	95	28.2
Master's degree	75	22.3	63	18.7	47	13.9
PhD or other advanced degree	57	16.9	102	30.3	90	26.7
Do not know	16	4.7	17	5.0	40	11.9
Does not apply	-----	-----	5	1.5	22	6.5

College enrollment intention indicators descriptive statistics. A majority of the respondents indicated that they were likely to attend a four-year college (63.6%) while a third reported that they were likely to attend a two-year college (30.6%) in response to the question: "As things stand now, how far in school do you think you will get?" Close to half of the respondents stated that, ideally, they would like to obtain a doctorate or other advanced degree (40.7%), while close to a third said that, ideally, they would like to graduate from college (27.6%). A fifth of the respondents indicated that, ideally, they would like to obtain a master's degree (21.1%). Most of the respondents reported that they had taken either the SAT or ACT (81.2%); close to half indicated that they had taken AP tests (46.3%). More than half of the respondents had applied to a four-year college (61%). Of those who had applied to a four-year college, a majority had been accepted (84.3%). For those respondents who were pursuing further studies after high school, close to a third stated that they would be attending a community college (27.1%). Most respondents indicated that they would be attending a California State University school (39.8%). About a fifth of the respondents reported that they would be going to a University of California school (18.7%), while a minority indicated that they would be enrolling at a private college (9%). The frequencies and percentages for the college enrollment intention indicator variables are presented in Table 17.

Table 17
Frequencies and Percentages for the College Enrollment Intention Indicator Variables

Variable	Frequency	Percentage
Likelihood of attending		
Four-year college	210	63.6
Two-year college	101	30.6
Voc/tech/trade school	19	5.8
Ideal future		
Attend/complete two-year college	17	5.0
Attend four-year college	11	3.3
Graduate from four-year college	93	27.6
Obtain master's	71	21.1
Obtain PhD/advanced degree	137	40.7
Do not know	8	2.4
Took SAT/ACT		
No	51	18.8
Yes	221	81.2
Took AP tests		
No	116	34.4
Yes	156	46.3
Applied to four-year college		
No	106	39.0
Yes	166	61.0
Accepted at four-year college		
No	26	15.7
Yes	140	84.3
Type of college		
Community college	45	13.4
California State University	66	2.7
University of California	31	19.6
Private college	15	9.2
Other	9	4.5

Procedure. To determine whether student college aspirations and college enrollment intention indicators (that were measured on a nominal or ordinal scale) were related to overall perceived parental support, independent *t*-test procedures were conducted for binary variables; statistical significance was assessed at the two-tailed *p*-value of .05. Analysis of variance (ANOVA) procedures were conducted for variables with three or more levels. Post-hoc Tukey tests were conducted to test which group comparisons were statistically significant. To determine whether college enrollment intention indicators (that were measured on an interval or ratio scale) were related to overall perceived parental support, Pearson correlation procedures were conducted. Statistical significance was assessed at the two-tailed *p*-value of .05. Analysis of variance (ANOVA) and Post-hoc Tukey test procedures were also conducted to determine whether student college aspirations and college enrollment intention indicators were related to overall perceived parental support, after controlling for the effects of select demographic factors (i.e., student gender, economic status, parent immigration status, home language, and parental education) and also whether college enrollment intention indicators were related to overall

perceived support after controlling for both the abovementioned demographic factors and student aspirations.

Student aspirations. The means and standard deviations for overall support across levels of student aspirations are presented in Table 18. Student aspirations were significantly related to overall support (F (5,331) = 2.56, p = .027). Although post-hoc Tukey test procedures did not yield any significant comparisons, the pattern of means indicate that the overall support scores of students with higher aspirations (i.e., four-year of college and more) tended to be higher than the overall support scores of students with lower aspirations (i.e., completing a two-year college and attending college).

Table 18

Means and Standard Deviations for Overall Support across Levels of Student Aspirations

Student Aspiration	N	Mean	SD
Attend/complete two-year college	17	2.84	.54
Attend four-year college	11	2.88	.56
Graduate from four-year college	93	3.10	.42
Obtain master's	71	3.16	.43
Obtain PhD/other advanced degree	137	3.17	.47
Do not know	8	2.95	.52

After re-running the aforementioned analysis while controlling for the effects of the demographic factors, student aspirations were not significantly related to overall support (F (5,158) = 1.47, p = .204). The means and standard deviations for overall support across levels of student aspirations (after controlling for demographic factors) are presented in Table 19.

Table 19

Means and Standard Deviations for Overall Support across Levels of Student Aspirations, Controlling for Demographic Factors

Student Aspiration	N	Mean	SD
Attend/complete two-year college	17	2.84	.54
Attend four-year college	11	2.88	.56
Graduate from four-year college	93	3.10	.42
Obtain master's	71	3.16	.43
Obtain PhD/other advanced degree	137	3.17	.47
Do not know	8	2.95	.52

College enrollment intention indicators. The means and standard deviations of overall support for the intent variables are displayed in Table 20. The findings reveal that taking the SAT or ACT was not significantly related to overall support (t (270) = -.70, p = .485). Taking AP tests was also not significantly related to overall support (t (270) = -.63, p = .531). Applying to a four-year college was not significantly related to overall support as well (t (270) = .04, p = .967). Similarly, acceptance to a four-year college was not significantly related to overall support (t (164) = -1.21, p = .229). The type of college chosen was also not significantly related to overall support (F (4,161) = .30, p = .875).

Table 20
Means and Standard Deviations for Overall Support across College Enrollment Intention Indicators

College Enrollment Intention Indicator	N	Mean	SD
Took SAT/ACT			
No	51	3.06	.46
Yes	221	3.11	.47
Took AP tests			
No	116	3.12	.45
Yes	156	3.09	.48
Applied to a four-year college			
No	106	3.11	.47
Yes	166	3.10	.46
Accepted to a four-year college			
No	26	3.00	.50
Yes	140	3.12	.45
Type of college chosen			
Other	9	3.24	.28
Community college	45	3.10	.45
California State University	66	3.09	.43
University of California	31	3.07	.53
Private college	15	3.16	.58

After controlling for the effects of the demographic factors, taking the SAT or ACT was not significantly related to overall support (F (1,162) = .02, p = .881) nor was taking the AP exam significantly related to overall support (F (1,162) = .48, p = .489). Additionally, after controlling for the effects of the demographic factors, applying to a four-year college was not significantly related to overall support (F (1,162) = .93, p = .337) nor was the type of college chosen significantly related to overall support (F (4,89) = .55, p = .698). However, after controlling for the effects of the demographic factors, acceptance to a four-year college was significantly related to overall support (F (1,92) = 4.52, p = .036); respondents who were accepted to a four-year college reported receiving greater overall support (M = 3.12, SD = .45) than respondents who were not accepted to a four-year college (M = 3.00, SD = .50). The means and standard deviations of overall support for the intent variables are displayed in Table 21.

After controlling for the effects of both the demographic factors and student aspirations, neither taking the SAT or ACT (F (1,157) = .01, p = .923) nor taking AP tests (F (1,157) = .46, p = .498) were significantly related to overall support. Furthermore, after controlling for the effects of both demographic factors and student aspirations, applying to a four-year college was not significantly related to overall support (F (1,157) = .98, p = .325). Similarly, after controlling for the effects of both the demographic factors and student aspirations, acceptance to a four-year college was not significantly related to overall support (F (1,87) = 3.53, p = .064). After controlling for the effects of both the demographic factors and student aspirations, the type of college chosen was also not significantly related to overall support (F (4,84) = .50, p = .740). The means and standard deviations for overall support across the intent variables are displayed in Table 22.

Table 21

Means and Standard Deviations for Overall Support across College Enrollment Intention Indicators, Controlling for Demographic Factors

College Enrollment Intention Indicator	N	Mean	SD
Took SAT/ACT			
No	51	3.06	.46
Yes	221	3.11	.47
Took AP tests			
No	116	3.12	.45
Yes	156	3.09	.48
Applied to a four-year college			
No	106	3.11	.46
Yes	166	3.10	.50
Accepted to a four-year college			
No	26	3.00	.45
Yes	140	3.12	.47
Type of college chosen			
Other	9	3.24	.28
Community college	45	3.10	.45
California State University	66	3.09	.43
University of California	31	3.07	.53
Private college	15	3.16	.58

Table 22

Means and Standard Deviations for Overall Support across College Enrollment Intention Indicators, Controlling for Demographic Factors and Student Aspirations

College Enrollment Intention Indicator	N	Mean	SD
Took SAT/ACT			
No	51	3.06	.46
Yes	221	3.11	.47
Took AP tests			
No	116	3.12	.45
Yes	156	3.09	.48
Applied to a four-year college			
No	106	3.11	.47
Yes	166	3.10	.46
Accepted to a four-year college			
No	26	3.00	.50
Yes	140	3.12	.45
Type of college chosen			
Other	9	3.24	.28
Community college	45	3.10	.45
California State University	66	3.09	.43
University of California	31	3.07	.53
Private college	15	3.16	.58

RQ3b: What is the relation between student aspirations and college enrollment intention indicators, and parents' propensity to offer interventionist versus noninterventionist forms of support?

Procedure. To determine whether parenting style of support provision varied significantly across students' college aspirations and college enrollment intention indicators (that were measured on a nominal or ordinal scale), analysis of variance (ANOVA) procedures were conducted. Post-hoc Tukey tests were conducted to test which group comparisons were statistically significant. To determine whether college enrollment intention indicators (that were measured on an interval or ratio scale) were related to the four styles of providing support, Pearson correlation procedures were conducted. Statistical significance was assessed at the two-tailed *p*-value of .05. Similar procedures were used to examine the strength of correlation between aspirations and the college enrollment intention indicators, and the four styles of support, after controlling for the effects of select demographic factors (i.e., student gender, economic status, parent immigration status, home language, and parental education). Comparable procedures were used to further examine the relation between college enrollment intention indicators and the four styles of support when holding both the aforementioned demographic factors and aspirations constant.

Student aspirations. The univariate findings summarized in Table 23 indicate that Intervention College Admissions factor scores varied significantly across aspirations categories (F (5,331) = 2.94, p = .013). Although post-hoc Tukey test procedures did not yield any significant comparisons, the pattern of means indicate that the Intervention College Admissions factor scores of students with higher aspirations (i.e., four-year college and more) tended to be higher than those scores of students with lower aspirations (i.e., completing a two-year college and attending college). Nonintervention Encourage factor scores also varied significantly across aspiration categories (F (5,331) = 2.81, p = .017). Post-hoc Tukey results reveal that students who aspired to obtain a doctorate or other advanced degree (M = 3.78, SD = .48) had significantly higher Nonintervention Encourage factor scores than students who aspired to attend or complete a two-year college program (M = 3.35, SD = .78; p = .025).

After controlling for the effects of select demographic factors, the univariate findings summarized in Table 24 indicate that Intervention College Admissions factor scores varied significantly across aspiration categories (F (5,158) = 2.90, p = .016). Although post-hoc Tukey test procedures did not yield any significant comparisons, the pattern of means indicates that the Intervention College Admissions factor scores of students with higher aspirations (i.e., four-year college and more) tended to be higher than the scores of students with lower aspirations (i.e., completing a two-year college and attending college).

Table 23

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Student Aspiration Levels

Student Aspiration	N	Mean	SD	F	Sig.
Broad Intervention				1.39	.229
Attend/complete two-year college	17	1.84	.66		
Attend four-year college	11	2.08	.96		
Graduate from four-year college	93	2.10	.69		
Obtain master's	71	2.23	.72		
Obtain PhD/advanced degree	137	2.21	.81		
Do not know	8	1.78	.67		
Intervention College Admissions				2.94	.013
Attend/complete two-year college	17	2.65	.79		
Attend four-year college	11	2.35	.69		
Graduate from four-year college	93	3.00	.53		
Obtain master's	71	3.00	.64		
Obtain PhD/advanced degree	137	2.95	.74		
Do not know	8	2.67	.76		
Nonintervention Purpose				1.85	.102
Attend/complete two-year college	17	3.53	.47		
Attend four-year college	11	3.69	.39		
Graduate from four-year college	93	3.63	.44		
Obtain master's	71	3.69	.36		
Obtain PhD/advanced degree	137	3.75	.40		
Do not know	8	3.64	.53		
Nonintervention Encourage				2.81	.017
Attend/complete two-year college	17	3.35_a	.78		
Attend four-year college	11	3.39	.92		
Graduate from four-year college	93	3.66	.56		
Obtain master's	71	3.71	.51		
Obtain PhD/advanced degree	137	3.78_a	.48		
Do not know	8	3.71	.70		

Note. Means with the same subscript are significantly different at $p < .05$ in the Tukey honestly significant difference comparison.

Table 24

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Student Aspiration Levels, Controlling for Demographic Factors

Student Aspiration	N	Mean	SD	F	Sig.
Broad Intervention				1.29	.270
Attend/complete two-year college	17	1.84	.66		
Attend four-year college	11	2.08	.96		
Graduate from four-year college	93	2.10	.69		
Obtain master's	71	2.23	.72		
Obtain PhD/advanced degree	137	2.21	.81		
Do not know	8	1.78	.67		
Intervention College Admissions				2.90	.016
Attend/complete two-year college	17	2.65	.79		
Attend four-year college	11	2.35	.69		
Graduate from four-year college	93	3.00	.53		
Obtain master's	71	3.00	.64		
Obtain PhD/advanced degree	137	2.95	.74		
Do not know	8	2.67	.76		
Nonintervention Purpose				.32	.900
Attend/complete two-year college	17	3.53	.47		
Attend four-year college	11	3.69	.39		
Graduate from four-year college	93	3.63	.44		
Obtain master's	71	3.69	.36		
Obtain PhD/advanced degree	137	3.75	.40		
Do not know	8	3.64	.53		
Nonintervention Encourage				1.01	.413
Attend/complete two-year college	17	3.35	.78		
Attend four-year college	11	3.39	.92		
Graduate from four-year college	93	3.66	.56		
Obtain master's	71	3.71	.51		
Obtain PhD/advanced degree	137	3.78	.48		
Do not know	8	3.71	.70		

College enrollment intention indicators. As can be seen in Table 25, the findings reveal that taking the SAT or ACT was not significantly related to any of the four styles of parental support. Taking AP tests was also not significantly related to the four styles of parental support; as shown in Table 26, none of the univariate tests yielded statistically significant findings. Applying to a four-year college was not significantly related to the four styles of parental support; as the findings in Table 27 reveal, none of the univariate tests yielded statistically significant findings. The findings summarized in Table 28 indicate that acceptance to a four-year college was significantly related to Intervention College Admissions type of support (F (1,164) = 5.14, p = .025). That is, Intervention College Admissions scores differed significantly across acceptance groups; respondents who were not accepted to a four-year college (M = 2.64, SD = .74) had significantly lower scores than respondents who were accepted to a four-year college (M = 2.96, SD = .64). As can be gleaned from the findings presented in Table 29, the type of college chosen was not significantly related to the four styles of parental support.

Table 25

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Respondents who did not take and who took the SAT/ACT

SAT/ACT	N	Mean	SD	F	Sig.
Broad Intervention				.92	.339
No	51	2.03	.72		
Yes	221	2.15	.76		
Intervention College Admissions				.31	.577
No	51	2.86	.68		
Yes	221	2.92	.68		
Nonintervention Purpose				.80	.373
No	51	3.71	.60		
Yes	221	3.68	.56		
Nonintervention Encourage				.32	.571
No	51	3.71	.41		
Yes	221	3.68	.42		

Table 26

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Respondents who did not take and who took AP Tests

AP Tests	N	Mean	SD	F	Sig.
Broad Intervention				.18	.676
No	116	2.15	.76		
Yes	156	2.11	.75		
Intervention College Admissions				.06	.806
No	116	2.90	.67		
Yes	156	2.92	.69		
Nonintervention Purpose				.16	.688
No	116	3.71	.41		
Yes	156	3.68	.42		
Nonintervention Encourage				2.11	.148
No	116	3.75	.50		
Yes	156	3.64	.61		

Table 27

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Respondents who did not and who did Apply to a Four-Year College

Applied to Four-Year College	N	Mean	SD	F	Sig.
Broad Intervention				.33	.568
No	106	2.16	.79		
Yes	166	2.10	.73		
Intervention College Admissions				.02	.887
No	106	2.90	.70		
Yes	166	2.91	.67		
Nonintervention Purpose				1.94	.165
No	106	3.66	.42		
Yes	166	3.72	.41		
Nonintervention Encourage				.66	.417
No	106	3.70	.60		
Yes	166	3.68	.55		

Table 28

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Respondents who were not and who were Accepted to a Four-Year College

Accepted to Four-Year College	N	Mean	SD	F	Sig.
Broad Intervention				.97	.326
No	26	1.97	.76		
Yes	140	2.13	.73		
Intervention College Admissions				5.14	.025
No	26	2.64	.74		
Yes	140	2.96	.64		
Nonintervention Purpose				.08	.782
No	26	3.74	.40		
Yes	140	3.71	.41		
Nonintervention Encourage				.01	.939
No	26	3.65	.63		
Yes	140	3.68	.54		

Table 29
Means, Standard Deviations, and Univariate Results for Parent Support Styles across College Type Chosen

College Type Chosen	N	Mean	SD	F	Sig.
Broad Intervention				.79	.535
Other	9	2.11	.67		
Community college	45	2.09	.73		
California State University	66	2.06	.75		
University of California	31	2.08	.72		
Private college	15	2.42	.74		
Intervention College Admissions				.80	.527
Other	9	3.91	.51		
Community college	45	3.75	.67		
California State University	66	3.74	.62		
University of California	31	3.55	.71		
Private college	15	3.75	.82		
Nonintervention Purpose				1.68	.156
Other	9	3.91	.11		
Community college	45	3.75	.37		
California State University	66	3.74	.38		
University of California	31	3.55	.52		
Private college	15	3.75	.44		
Nonintervention Encourage				.61	.655
Other	9	3.82	.34		
Community college	45	3.73	.46		
California State University	66	3.67	.58		
University of California	31	3.58	.60		
Private college	15	3.67	.70		

I re-ran the analysis of RQ3b controlling for select demographic variables. The findings reveal that after controlling for demographics, taking the SAT or ACT was not significantly related to the four styles of parental support; as can be seen in Table 30, none of the univariate tests yielded statistically significant findings. Likewise, after controlling for demographics, taking AP tests was also not significantly related to the four styles of parental support; as shown in Table 31, none of the univariate tests yielded statistically significant findings. After controlling for the effects of select demographic variables, applying to a four-year college was not significantly related to the four styles of parental support; as the findings in Table 32 reveal, none of the univariate tests yielded statistically significant findings. Acceptance to a four-year college was significantly related to Intervention College Admissions type of support. As can be gleaned from the findings summarized in Table 33, Intervention College Admissions scores differed significantly across acceptance groups (F (1,92) = 7.73, p = .007). Respondents who were not accepted to a four-year college (M = 2.64, SD = .74) had significantly lower scores than respondents who were accepted to a four-year college (M = 2.96, SD = .64). The type of college chosen was significantly related to Nonintervention Purpose type of support. As the univariate findings summarized in Table 34 reveal, Nonintervention Purpose scores differed significantly across type of college chosen (F (4,89) = 3.05, p = .021). Respondents who chose to go to a UC school (M = 3.55, SD = .52) had significantly lower scores than respondents who chose to go to a

community college (M = 3.75, SD = .37; $p < .045$) and respondents who chose to go to a CSU school (M = 3.74, SD = .38; $p < .028$).

Table 30

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Respondents who did not take and who took the SAT/ACT, Controlling for Demographic Factors

SAT/ACT	N	Mean	SD	F	Sig.
Broad Intervention				.13	.725
No	51	2.03	.72		
Yes	221	2.15	.76		
Intervention College Admissions				.02	.898
No	51	2.86	.68		
Yes	221	2.92	.68		
Nonintervention Purpose				.29	.591
No	51	3.71	.60		
Yes	221	3.68	.56		
Nonintervention Encourage				.19	.665
No	51	3.71	.41		
Yes	221	3.68	.42		

Table 31

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Respondents who did not take and who took AP Tests, Controlling for Demographic Factors

AP Tests	N	Mean	SD	F	Sig.
Broad Intervention				.41	.522
No	116	2.15	.76		
Yes	156	2.11	.75		
Intervention College Admissions				.01	.912
No	116	2.90	.67		
Yes	156	2.92	.69		
Nonintervention Purpose				.20	.657
No	116	3.71	.41		
Yes	156	3.68	.42		
Nonintervention Encourage				1.19	.276
No	116	3.75	.50		
Yes	156	3.64	.61		

Table 32

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Respondents who did not and who did Apply to a Four-Year College, Controlling for Demographic Factors

Applied to Four-Year College	N	Mean	SD	F	Sig.
Broad Intervention				1.51	.221
No	106	2.16	.79		
Yes	166	2.10	.73		
Intervention College Admissions				.16	.691
No	106	2.90	.70		
Yes	166	2.91	.67		
Nonintervention Purpose				.00	.981
No	106	3.66	.42		
Yes	166	3.72	.41		
Nonintervention Encourage				2.11	.149
No	106	3.70	.60		
Yes	166	3.68	.55		

Table 33

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Respondents who were not and who were Accepted to a Four-Year College, Controlling for Demographic Factors

Accepted to Four-Year College	N	Mean	SD	F	Sig.
Broad Intervention				3.03	.085
No	26	1.97	.76		
Yes	140	2.13	.73		
Intervention College Admissions				7.73	.007
No	26	2.64	.74		
Yes	140	2.96	.64		
Nonintervention Purpose				.91	.344
No	26	3.74	.40		
Yes	140	3.71	.41		
Nonintervention Encourage				.79	.377
No	26	3.65	.63		
Yes	140	3.68	.54		

Table 34

Means, Standard Deviations, and Univariate Results for Parent Support Styles across College Type Chosen, Controlling for Demographic Factors

College Type Chosen	N	Mean	SD	F	Sig.
Broad Intervention				.29	.882
Other	9	2.11	.67		
Community college	45	2.09	.73		
California State University	66	2.06	.75		
University of California	31	2.08	.72		
Private college	15	2.42	.74		
Intervention College Admissions				.88	.479
Other	9	3.91	.51		
Community college	45	3.75	.67		
California State University	66	3.74	.62		
University of California	31	3.55	.71		
Private college	15	3.75	.82		
Nonintervention Purpose				3.05	.021
Other	9	3.91	.11		
Community college	45	3.75_a	.37		
California State University	66	3.74_a	.38		
University of California	31	3.55_b	.52		
Private college	15	3.75	.44		
Nonintervention Encourage				.82	.510
Other	9	3.82	.34		
Community college	45	3.73	.46		
California State University	66	3.67	.58		
University of California	31	3.58	.60		
Private college	15	3.67	.70		

Note. Means with different subscripts differ significantly at $p < .05$ in the Tukey honestly significant difference comparison.

After controlling for both demographic factors (i.e., student gender, economic status, parent immigration status, home language, and parental education) and student aspirations, taking the SAT or ACT was not significantly related to the four styles of parental support; as can be seen in Table 35, none of the univariate tests yielded statistically significant findings. After controlling for demographics and student aspirations, taking AP tests was also not significantly related to the four styles of parental support; as shown in Table 36, none of the univariate tests yielded statistically significant findings. After controlling for demographics and student aspirations, applying to a four-year college was not significantly related to the four styles of parental support; as the findings in Table 37 reveal, none of the univariate tests yielded statistically significant findings. After controlling for demographics and student aspirations, acceptance to a four-year college was significantly related to Intervention College Admissions type of support. As can be seen from the findings summarized in Table 38, Intervention College Admissions scores differed significantly across acceptance groups (F (1,87) = 7.70, p = .007). Respondents who were not accepted to a four-year college (M = 2.64, SD = .74) had significantly lower scores than respondents who were accepted to a four-year college (M = 2.96, SD = .64).

After controlling for demographics and student aspirations, the type of college chosen was not significantly related to the four styles of parental support; as the findings in Table 39 show, none of the univariate tests yielded statistically significant findings.

Table 35

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Respondents who did not take and who took the SAT/ACT, Controlling for Demographic Factors and Student Aspirations

SAT/ACT	N	Mean	SD	F	Sig.
Broad Intervention				.08	.785
No	51	2.03	.72		
Yes	221	2.15	.76		
Intervention College Admissions				.04	.848
No	51	2.86	.68		
Yes	221	2.92	.68		
Nonintervention Purpose				.24	.624
No	51	3.71	.60		
Yes	221	3.68	.56		
Nonintervention Encourage				.14	.711
No	51	3.71	.41		
Yes	221	3.68	.42		

Table 36

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Respondents who did not take and who took AP Tests, Controlling for Demographic Factors and Student Aspirations

AP Tests	N	Mean	SD	F	Sig.
Broad Intervention				.51	.474
No	116	2.15	.76		
Yes	156	2.11	.75		
Intervention College Admissions				.00	.997
No	116	2.90	.67		
Yes	156	2.92	.69		
Nonintervention Purpose				.04	.842
No	116	3.71	.41		
Yes	156	3.68	.42		
Nonintervention Encourage				.83	.364
No	116	3.75	.50		
Yes	156	3.64	.61		

Table 37

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Respondents who did not and who did Apply to a Four-Year College, Controlling for Demographic Factors and Student Aspirations

Applied to Four-Year College	N	Mean	SD	F	Sig.
Broad Intervention				1.41	.237
No	106	2.16	.79		
Yes	166	2.10	.73		
Intervention College Admissions				.14	.706
No	106	2.90	.70		
Yes	166	2.91	.67		
Nonintervention Purpose				.01	.941
No	106	3.66	.42		
Yes	166	3.72	.41		
Nonintervention Encourage				2.23	.137
No	106	3.70	.60		
Yes	166	3.68	.55		

Table 38

Means, Standard Deviations, and Univariate Results for Parent Support Styles across Respondents who were not and who were Accepted to a Four-Year College, Controlling for Demographic Factors and Student Aspirations

Accepted to Four-Year College	N	Mean	SD	F	Sig.
Broad Intervention				1.80	.184
No	26	1.97	.76		
Yes	140	2.13	.73		
Intervention College Admissions				7.70	.007
No	26	2.64	.74		
Yes	140	2.96	.64		
Nonintervention Purpose				.66	.418
No	26	3.74	.40		
Yes	140	3.71	.41		
Nonintervention Encourage				.60	.441
No	26	3.65	.63		
Yes	140	3.68	.54		

Table 39

Means, Standard Deviations, and Univariate Results for Parent Support Styles across College Type Chosen, Controlling for Demographic Factors and Student Aspirations

College Type Chosen	N	Mean	SD	F	Sig.
Broad Intervention				.61	.657
Other	9	2.11	.67		
Community college	45	2.09	.73		
California State University	66	2.06	.75		
University of California	31	2.08	.72		
Private college	15	2.42	.74		
Intervention College Admissions				.89	.474
Other	9	3.91	.51		
Community college	45	3.75	.67		
California State University	66	3.74	.62		
University of California	31	3.55	.71		
Private college	15	3.75	.82		
Nonintervention Purpose				2.26	.069
Other	9	3.91	.11		
Community college	45	3.75	.37		
California State University	66	3.74	.38		
University of California	31	3.55	.52		
Private college	15	3.75	.44		
Nonintervention Encourage				.87	.486
Other	9	3.82	.34		
Community college	45	3.73	.46		
California State University	66	3.67	.58		
University of California	31	3.58	.60		
Private college	15	3.67	.70		

RQ4: How do personal plans/expectations and parental aspirations as perceived by participant seniors compare to personal plans/expectations and parental aspirations as perceived by a sample of same grade Latino students from the western region of the United States (ELS:2002)?

ELS:2002 descriptive statistics. The sample of ELS:2002 western region Latinos was nearly split evenly by gender. English was the first language for over 47% of the sample, while 52% of the sample had another first language (most likely Spanish). About a third of the sample had mothers who did not finish high school (33.6%); the mothers of about a fifth (19.7%) of the sample had graduated from high school or had their GED; the mothers of 10% of the sample were reported to have attended a two-year college without earning a degree; less than a tenth of the respondents (7.3%) had mothers who had graduated from college. Similarly, close to a third of the sample had fathers with less than a high school education (30.9%); slightly more than a fifth of the sample had fathers with a high school diploma or GED (22.5%); less than a tenth of the respondents' fathers (8.7%) had graduated from college. The frequencies and percentages for the home language and gender variables, and parental level of education variables, are presented in Tables 40 and 41, respectively.

Table 40

Frequencies and Percentages for Home Language and Gender for ELS:2002 Latino Western Region

Variable	Frequency	Percentage
Gender		
Male	446	50.6
Female	436	49.4
Home Language		
English first language	411	47.6
Other first language	452	52.4

Table 41

Frequencies and Percentages for Parents' Level of Education for ELS:2002 Latino Western Region

Level of Education	Mother		Father	
	Frequency	Percentage	Frequency	Percentage
Did not finish H.S.	270	33.6	234	30.9
Graduated from high school or GED	158	19.7	170	22.5
Attended two-year school, no degree	80	10.0	53	7.0
Graduated from two-year school	33	4.1	20	2.6
Attended College, no four-year degree	48	6.0	42	5.5
Graduated from four-year college	59	7.3	66	8.7
Completed Master's degree or equivalent	35	4.4	33	4.4
Completed PhD, MD, other advanced degree	14	1.7	21	2.8
Don't know	106	13.2	118	15.6

Comparison of education. Cross-tabulation procedures were conducted to assess whether the frequency pattern of maternal and paternal levels of education for Puente seniors varied significantly from that of western region ELS:2002 Latino seniors. The findings in Table 42 indicate that there was a statistically significant relation between sample and maternal level of education (χ^2 (7) = 30.53, p = .000). In comparison to the western region ELS:2002 sample of Latino seniors (38.7%) a greater percentage of Puente respondents had mothers with less than a high school degree (49.8%). Further, in comparison to the western region ELS:2002 sample of Latino seniors (6.9%), a smaller percentage of Puente respondents had mothers who attended college (2.6%). Similarly, in comparison to the western region ELS:2002 sample of Latino seniors (3%), a smaller percentage of Puente respondents had mothers who graduated from college (8.5%). The findings in Table 43 indicate that there was a statistically significant relation between sample and paternal level of education (χ^2 (7) = 41.93, p = .000). In comparison to the western region ELS:2002 Latino sample (36.7%) a greater percentage of

Puente respondents had fathers with less than a high school degree (52.6%). Further, in comparison to the western region ELS:2002 Latino sample (6.6%), a smaller percentage of Puente respondents had fathers who attended college (2.8%). Similarly, in comparison to the western region ELS:2002 Latino sample (10.3%), a smaller percentage of Puente respondents had fathers who graduated from college (4.6%). In addition, in comparison to the western region ELS:2002 Latino sample (5.2%), a smaller percentage of Puente respondents had fathers who obtained a master's degree (1.4%). In comparison to the western region ELS:2002 Latino sample (3.3%), none of the Puente respondents had fathers who obtained a doctorate or other advanced degree.

Table 42

Cross-tabulation Results for Maternal Level of Education

Maternal Level of Education	Puente		ELS:2002	
	Frequency	Percentage	Frequency	Percentage
Less than high school	151	49.8	270	38.7
GED/high school diploma	77	25.4	159	22.8
Attended two-year college	33	10.9	80	11.5
Completed two-year college	17	5.6	33	4.7
Attended four-year college	8	2.6	48	6.9
Graduated from four-year college	9	3.0	59	8.5
Obtained master's degree	6	2.0	35	5.0
Obtained PhD/other advanced degree	2	.7	14	2.0

Table 43

Cross-tabulation Results for Paternal Level of Education

Paternal Level of Education	Puente		ELS:2002	
	Frequency	Percentage	Frequency	Percentage
Less than high school	150	52.6	235	36.7
GED/high school diploma	82	28.8	170	26.6
Attended two-year college	21	7.4	53	8.3
Completed two-year college	7	2.5	20	3.1
Attended college	8	2.8	42	6.6
Graduated from college	13	4.6	66	10.3
Obtained master's degree	4	1.4	33	5.2
Obtained PhD/other advanced degree	0	.0	21	3.3

Personal plans/expectations. Cross-tabulation procedures were conducted to assess whether the frequency pattern of personal plans/expectations of Puente seniors varied significantly from that of western region United States ELS:2002 Latino seniors. The findings in Table 44 indicate that there was a statistically significant relation between the sample and plans for a post-high school education (χ^2 (4) = 62.14, p = .000). In comparison to western region ELS:2002 Latino seniors (75.4%), a greater percentage of Puente seniors (94%) indicated that they would pursue a post-high school education. The findings in Table 45 reveal that there was a statistically significant relation between sample and type of school the seniors were likely to attend (χ^2 (4) = 69.38, p = .000). In comparison to western region ELS:2002 Latino seniors (44.8%), a greater percentage of Puente seniors (63.6%) indicated that they were most likely to attend a four-year college. In comparison to western region ELS:2002 Latino seniors (45.6%), a smaller percentage of Puente seniors (30.6%) reported that they were most likely to attend a two-year community college. Finally, in comparison to western region ELS:2002 Latino seniors

(9.6%), a smaller percentage of Puente seniors (5.8%) stated that they were most likely to attend a vocational, technical, or trade school.

Table 44

Cross-tabulation Results for Plans for a Post-High School Education

Post-High School Education	Puente		Western	
	Frequency	Percentage	Frequency	Percentage
Yes	318	94.4	538	75.4
No	5	1.5	88	12.3
Do not know	14	4.2	88	12.3

Table 45

Cross-tabulation Results for Plans for a Post-High School Education

Type of School	Puente		Western	
	Frequency	Percentage	Frequency	Percentage
Four-year college	210	63.6	289	44.8
Two-year college	101	30.6	294	45.6
Vocational/technical/trade	19	5.8	62	9.6

Perceived maternal aspirations and desires. The findings presented in Table 46 indicate that there was a statistically significant relation between sample and maternal level of educational aspirations (χ^2 (16) = 73.68, p = .000). In comparison to western region ELS:2002 Latino seniors (15.6%), a greater percentage of Puente seniors (30.7%) perceived that their mothers wanted them to obtain a doctorate or some other advanced degree. The findings in Table 47 indicate that there was a statistically significant relation between sample and maternal desire for student's action right after high school (χ^2 (12) = 49.41, p = .000). In comparison to western region ELS:2002 Latino seniors (73.8%), a greater percentage of Puente seniors (90.4%) perceived that their mothers wanted them to go to college right after graduating from high school.

Table 46

Cross-tabulation Results for Perceived Maternal Aspirations

Perceived Maternal Aspiration	Puente		ELS:2002	
	Frequency	Percentage	Frequency	Percentage
Less than high school	9	2.7	43	5.5
GED/other equivalent	1	.3	15	1.9
High school graduate	4	1.2	44	5.6
Attend/complete two-year college	14	4.2	70	8.9
Attend four-year college	9	2.7	31	4.0
Graduate from four-year college	113	34.0	246	31.4
Obtain master's degree	63	19.0	140	17.9
Obtain PhD/other advanced degree	102	30.7	122	15.6
Do not know	17	5.1	73	9.3

Table 47
Cross-tabulation Results for Perceived Maternal Desires

Perceived Maternal Desire	Puente		ELS:2002	
	Frequency	Percentage	Frequency	Percentage
Go to college	303	90.4	507	73.8
Get a full-time job	5	1.5	24	3.5
Enter voc/tech apprenticeship	5	1.5	15	2.2
Enter military service	0	.0	9	1.3
Get married	1	.3	5	.7
Do what I want to do	15	4.5	103	15.0
Do not know	6	1.8	24	3.5

Perceived paternal aspirations and desires. The findings in Table 48 indicate that there was a statistically significant relation between sample and paternal level of education aspirations (χ^2 (16) = 57.30, p = .000). In comparison to western region ELS:2002 Latino seniors (15.6%), a greater percentage of Puente seniors (28.6%) perceived that their fathers would want them to obtain a doctorate or some other advanced degree. The findings in Table 49 indicate that there was a statistically significant relation between sample and paternal desire for student's action right after high school (χ^2 (10) = 23.60, p = .009). In comparison to western region ELS:2002 Latino seniors (68.6%), a greater percentage of Puente seniors (80.6%) perceived that their fathers would want them to go to college right after graduating from high school.

Table 48
Cross-tabulation Results for Perceived Paternal Aspirations

Perceived Paternal Aspiration	Puente		ELS:2002	
	Frequency	Percentage	Frequency	Percentage
Less than high school	11	3.5	36	4.9
GED/other equivalent	0	.0	13	1.8
High school graduate	5	1.6	52	7.0
Attend/complete two-year college	17	5.4	62	8.4
Attend four-year college	10	3.2	30	4.1
Graduate from four-year college	95	30.2	219	29.7
Obtain master's degree	47	14.9	111	15.0
Obtain PhD/other advanced degree	90	28.6	115	15.6
Do not know	40	12.7	100	13.6

Table 49
Cross-tabulation Results for Perceived Paternal Desires

Perceived Paternal Desire	Puente		ELS:2002	
	Frequency	Percentage	Frequency	Percentage
Go to college	245	80.6	443	68.6
Get a full-time job	8	2.6	37	5.7
Enter voc/tech apprenticeship	1	.3	16	2.5
Enter military service	1	.3	16	2.5
Do what I want to do	33	10.9	83	12.8
Do not know	16	5.3	51	7.9

CHAPTER IV
Discussion

The goal of this study was to examine how different types of parental support relate to the propensity of Latino students to aspire to attend and eventually enroll in college. In this final chapter, I present a summary of the significant findings from the current study in relation to existing literature. In addition, I acknowledge the present study's limitations. This chapter culminates with a discussion of potential implications for college preparation programs working with low-income Latino youth in general and the Puente Program in particular.

Key Findings

RQ1: What conceptual dimensions underlie the general construct of parental support as perceived by Latino students?

The purpose of the first research question was to investigate the conceptual dimensions underlying the 28 perceived support items from the Perceived Support and Aspirations Survey. Most questions from the Perceived Support and Aspirations Survey were pulled from the ELS:2002 Student Questionnaires and thus developed with intense rigor and deemed to be both reliable and valid measures (Ingels et al., 2002). A review of relevant research yielded no extant surveys that assess parental support for college, therefore I developed 28 questions intended to gauge parental support for college on what was thought to be two main dimensions distinguished by extent of behavioral involvement: interventionist (behavioral-based) and noninterventionist (non-behavioral-based). Item development was guided by both college choice and Latino parent involvement literature.

During instrument creation, I conceptualized the 28 perceived support items as being divided equally in terms of their focus on interventionist and noninterventionist forms of support in concordance with Cabrera and La Nasa's (2000) bi-dimensional classification of parental support. It was important to examine the factor structure of the perceived support items of the Perceived Support and Aspirations Survey in order to verify whether parental support was best conceptualized according to the subscale components hypothesized (i.e., interventionist and noninterventionist). While at face value the perceived support items of the Perceived Support and Aspirations Survey had enormous potential for use in college preparation programs and to make conclusions about the influence of parent support for college attendance, the psychometric properties first had to be verified.

In examining the integrity of the central instrument of the study, the Perceived Support and Aspirations Survey, several intriguing and some unexpected results emerged. Through an exploratory factor analysis on the Perceived Support and Aspirations Survey's perceived support items of 337 survey respondents, four factors were identified that best categorized typologies of support. Some items did not reach a reasonable fit (i.e., had very low values or cross-loaded onto other factors). Therefore, in order to present a factor structure with adequate fit, items with low factor loadings or those which cross-loaded onto other factors were eliminated. The results of the exploratory factor analysis suggest that rather than being a bi-dimensional construct, perceived support for college, as measured by the 28 items developed for the Perceived Support and Aspirations Survey, represent the expression of four distinct underlying dimensions labeled: Broad Intervention, Nonintervention Purpose, Intervention College Admissions, and Nonintervention Encourage.

The Broad Intervention factor is comprised of nine items assessing behavioral-based support for college focused on the early steps of college preparation (e.g., speaking with the school counselor, acquiring information about certain colleges, test preparation, course selection,

etc.). The Nonintervention Purpose factor contains five items measuring non-behavioral support for college focused on conveying the importance and purpose of postsecondary education. The Intervention College Admissions factor consists of five items gauging behavioral-based support centered on the final steps of college preparation (e.g., completing applications, editing essays, preparing for interviews, completing financial aid forms). Lastly, the Nonintervention Encourage factor encompasses three items measuring non-behavioral support for college focused on verbal encouragement to pursue a college education that centers on the active agency of the student him/herself. The list of items measuring each factor is displayed in Table 7.

Although the factor analysis yielded results differing from the originally proposed division of parental support for college into interventionist and noninterventionist domains, the four groupings of questions do relate to the two domains anticipated. The four factors simply appear to represent a more finely grained and further differentiated version of the two main forms of perceived support initially hypothesized. Specifically, the factors labeled Broad Intervention and Intervention College Admissions correspond well to the anticipated interventionist construct. Broad Intervention and Interventionist College Admissions encompass items assessing direct involvement or behavioral-based support centered on actively surpassing milestones along the road to college. The items within these two interventionist domains also necessitate some college knowledge and knowledge about how the educational system functions as well as what is needed to move along the path toward higher education. The factors labeled Nonintervention Purpose and Nonintervention Encourage correspond well to the anticipated noninterventionist construct as all the items within these subscales refer to non-behavioral motivational input.

Only one item, 13k (i.e., "My parents encourage me to take advantage of the help I receive from the Puente Program"), did not fall within the dimension hypothesized. That is, during the item development process, I considered item 13k to be gauging a form of noninterventionist support. Instead, exploratory factor analysis found item 13k to cluster best with items in the Broad Intervention subscale. Qualitative exploration could help to deepen knowledge about this unexpected association. However, it may simply be that this question assesses a specific form of targeted support that better represents a form of behavioral-based involvement than motivational input.

Finally, it is important to note that the internal consistency of the four factors was evaluated so as to gauge measurement quality. That is, items within the same factor were examined in order to determine reliability. Results demonstrate that all four measures were found to have acceptable alpha values and thus deemed reliable (Table 8).

RQ2a: How are parent characteristics (i.e., educational background, immigrant status, home language, and economic status) related to parents' style of providing support?

The purpose of part one of the second research question was to explore the relation between distinct parent characteristics (i.e., level of education, immigration status, home language, and economic status) and parenting styles of support for college as perceived by their children. In line with the revised model of parent involvement developed by Walker and colleagues (2005) as well as extant ethnographic and empirical research (Auerbach, 2006; Ceja, 2004; Fan et al., 2009; Goldenberg et al., 2001; Tinkler, 2002; Tornatzky et al., 2002), it was hypothesized that each of the demographic variables investigated would be directly associated with interventionist forms of support, but would have no significant correlation with noninterventionist forms of support. This hypothesis was not universally confirmed and the strength of associations varied with respect to type of interventionist support.

Level of education. Students whose mothers had higher levels of education in comparison to those whose mothers had lower levels of education were significantly more likely to report receiving interventionist forms of maternal support for college (Table 9). Specifically, students whose mothers did not complete high school reported lower levels of perceived Broad Intervention support than students whose mothers had their high school diploma or GED, had attended or completed a two-year college, or had attended or completed a four-year college or more (i.e., graduate school). The data also revealed a positive, significant relation between higher levels of maternal education and Intervention College Admissions support. That is, students whose mothers did not complete high school reported significantly lower levels of perceived Intervention College Admissions support than students whose mothers' highest levels of education were either attendance or completion of a four-year college or graduate school. Maternal education was not found to be significantly related to noninterventionist forms of support. As such, mothers with more education were just as likely as mothers with less education to convey to their children the importance/purpose of going to college and encourage their children to pursue postsecondary education.

These findings align well with extant empirical research indicating that low levels of education may hinder parents from providing behavioral forms of support for college attendance (Auerbach, 2006; Fan et al., 2009; Tinkler, 2002; Tornatzky et al., 2002). The interventionist forms of support pinpointed in this study require knowledge of the educational system and the important milestones to be surpassed on the way to college, termed by some as "college knowledge" (Tornatzky et al., 2002). As Tornatzky et al. (2002) explain, parents with more education "have an experience-based understanding of the higher education system and what needs to be done to qualify their children for admission" (p. 6). Hossler et al. (1999) note that "parents who have gone to college are familiar with the experience and are better equipped to explain to their children how the college system is structured, how it works, and how the student can prepare for it" (p. 26). Even those mothers whose highest levels of education were limited to completing high school or earning a GED were more likely to provide Broad Intervention forms of support to their children than mothers who did not complete high school. This may be because most of the mothers who were reported to have not completed high school came from Mexico where the average level of schooling completed among individuals age 15 and older is 7.9 years (Santibañez, Vernez, & Razquin, 2005). When compared to mothers who have completed their GED or attained a high school diploma, mothers with little to no education would be far less likely to understand how to navigate their children through the pathway to postsecondary education. Even if they had not enrolled in college themselves, mothers who have graduated from high school may have indeed taken the SAT/ACT and AP tests or even applied to colleges.

Furthermore, in addition to a heightened familiarity with the educational system, mothers with greater levels of education may have attained crucial skills to use in supporting their children by interventionist means. For instance, when compared to mothers who haven't completed high school, mothers who have their GED or high school diploma may have superior reading skills and thus be better equipped to review publications and other information about particular colleges or help a struggling student with class work (items 13e and 13m from the Perceived Support and Aspirations Survey, respectively). These findings are also well aligned with the revised model of parent involvement developed by Walker and colleagues (2005), which posits that parents are more likely to become involved in their children's education if they perceive themselves to have the necessary skills and knowledge to support their children's

achievement. According to the model, parents' decisions to become involved are also affected by their sense of educational self-efficacy. We can postulate that mothers who have not completed high school may feel unable to help their children and therefore do not support them by interventionist means.

Another possible reason why students with more educated mothers reported receiving greater levels of interventionist support has to do with social capital. It is likely that mothers with higher levels of education have greater access to "networks of formal and informal college knowledge" (Tornatzky et al., 2002, p. 6). As compared to less educated mothers, mothers with higher levels of education are more likely to have rich social capital, affording them the ability to more easily access information and resource providers who can assist them.

There were similarities and differences between the paternal association of perceived support and level of education and the corresponding maternal association. (Results for the paternal education variable are summarized in Table 10.) Similar to the maternal education variable, the data reveal that Intervention College Admissions support varied significantly across paternal level of education. However, unlike the maternal education variable, there were no statistically significant comparisons between aspiration levels. With this said, the data does suggest a trend to the effect that fathers with more education were more likely than those with less education to support their children by means of College Admissions support. An interpretation similar to the maternal interpretation can be made for this paternal data. Further, similar to the maternal variable, there was a statistically significant relation between higher levels of education and Broad Intervention support and the pattern of means suggests a trend to the effect that fathers with more education are more likely than those with less education to support their children by Broad Intervention means. Also analogous to mother's education, father's education was not found to be significantly correlated with noninterventionist means of support at $p < .05$.

Another similarity between the results of the maternal and paternal variables has to do with the "Other" category (encompassing students' responses indicating "Don't Know" and "Does Not Apply"). Specifically, students who did not know what level of education their mothers had attained or noted that the question was not applicable reported significantly lower levels of perceived Broad Intervention support than students whose mothers pursued a post-high school education. In a related vein, students whose fathers had completed high school or received their GED were significantly more likely to report receiving Broad Intervention forms of support than students who either did not know their father's highest level of education or students for whom this question was not applicable. There are several ways to interpret this similarity between maternal and paternal variables. Perhaps the likeness can be explained by the notion that students who answered "Don't Know" or "Does Not Apply" when asked about their parents' educational backgrounds have absentee parents. Thus, when compared to those students whose parents are reported to have a postsecondary education or even their high school diploma or GED, it makes sense that students who answered "Don't Know" or "Does Not Apply" would be less likely to report Broad Intervention support. Another possible explanation for these similar results may have to do with the underlying relation between knowledge of parents' backgrounds and the support parents provide. That is, perhaps students' lack of awareness about their parents' educational backgrounds is indicative of weaker or less intimate parent-child relationships. It would make sense then that students with weak ties to their parents would report less support from their parents.

Immigration status. Although I did not expect immigration status to be related to noninterventionist forms of support, students whose parents were born outside the United States reported greater levels of parental Nonintervention Purpose support. (Results pertaining to maternal and paternal immigration status variables are summarized in Tables 11 and 12, respectively.) This finding stands in contrast to Carpenter's (2008) analysis of the ELS:2002 database, which yielded no evidence of a significant relation between parents' expectations for their children's education and years spent in the United States. Although unanticipated and contrary to some research, the current study's statistically significant association between immigration status and Nonintervention Purpose support makes a great deal of sense.

Latino immigrants commonly refer to the United States as the land of opportunity or "*el país de las oportunidades*" (Goldenberg et al., 2001, p. 576). Suizzo and Stapleton (2007) state, "Latino Americans who immigrated more recently, who became residents of the U.S. voluntarily, and who were welcomed and assisted may be more aware of, and optimistic about, the value of education as a means of social mobility" (p. 549). Thus, immigrant Latino parents may rely on purpose driven statements in the form of *consejos* to support their children on the road to college, emphasizing why a college education is important in the United States. The parents are likely to draw upon their own life circumstances, pushing their children to achieve levels of education that they did not have the opportunity to reach due to the fact that they were born in countries where education is not regarded as a universal right, but rather a privilege. Hill and Torres (2010) report on an inverse relation between time spent living in the United States and levels of educational involvement and academic aspirations for one's children. Qualitative accounts suggest that "after a generation or more in the United States, the possibility of achieving the [American] Dream and the sure pathway of education become elusive" (Hill & Torres, 2010, p. 106). Further qualitative investigation is warranted in order to determine whether or not disillusionment and frustration is related to reduced Nonintervention Purpose support among U.S. born parents.

Students whose fathers were born in the United States were more likely to report receiving greater levels of Intervention College Admissions type of support than students whose fathers were born elsewhere. This finding aligns itself well with my hypothesis, select empirical research, and the revised model for parent involvement conceptualized by Walker and colleagues (2005), which presumes that parents with enhanced skills and knowledge, as well as feelings of self-efficacy, are more likely to involve themselves actively in their children's education. Corresponding well to this finding, through their review of the NELS:88 database for trends in parent involvement (operationalized as the frequency that parents discussed school experiences, high school and post-high school plans with their children) across generational status, Glick and White (2004) found that second-generation youth reported more parent involvement. Also well aligned with this finding, Tornatzky et al. (2002) found that non-immigrants have enhanced levels of college knowledge and attributed these increased levels to the greater resources and amounts of social and cultural capital that United States citizens can draw upon in support of their children's education. Having grown up in the United States, the fathers of the present study's respondents are presumed to have a stronger social network of friends, family, and community members from which to draw support for their children and facts about the college admissions process if they themselves lack such information. The fathers in the present study who were born in the United States progressed through the school system and thus are likely to have more information about the requirements for college admission than their immigrant counterparts, whether they proceeded onto college themselves or not. Furthermore, an enhanced

understanding of the American educational system may lead to greater feelings of self-efficacy (Walker et al., 2005) with respect to the provision of college support, leading to increased levels of interventionist support offered.

It is perplexing that a significant relation was not found between corresponding maternal variables (i.e., Intervention College Admissions and immigration status). This may be attributed to the differential roles of fathers versus mothers in child rearing. Again, further qualitative examination would be essential in order to better understand this result.

Home language. Contrary to prediction, home language was not significantly related to style of parental support. That is, students whose parents spoke only Spanish were no more likely to report receiving any given type of support than students whose parents spoke only English or a combination of the two languages (Table 13). This was an unexpected finding as I hypothesized that parents who spoke English would be better equipped to acquire the necessary forms of college knowledge to support their children on the path to postsecondary education. This hypothesis was supported by research noting that Latino parents who have limited English proficiency often feel uncomfortable within the school environment and speaking with school staff (Auerbach, 2006; Tinkler, 2002), thus limiting their ability to acquire information. Well aligned with my prediction, Tierney (2002) reported that, "when Spanish is the language of the family and the school is English intensive and actively discourages the speaking of Spanish, parents are hesitant to become involved" (p. 594). My hypothesis was based on the notion that language barriers impede the acquisition of college knowledge as most knowledge channels and sources are English-based (Tornatzky et al., 2002). Finally, this finding is also surprising given that immigration status was found to be significantly related to various forms of parental support and immigration status and home language are intuitively highly correlated.

In light of a strong foundation of extant research, the fact that my hypothesis was not born out may best be explained by the origin of the sample. Perhaps participation in the Puente Program, which is characterized by strong bilingual parent outreach and argued to be a form of parental education (Tierney, 2002), mediates the association between home language and parental support. The research by García Coll et al. (2002), which examined the relation between select socio-demographic/cultural variables, such as English language comfort, and parent involvement in education among a sample of Dominican, Portuguese, and Cambodian parents, supports this explanation. Through analyzing within group differences among their Dominican sample, the authors found that English language comfort was not a relevant predictor of parent involvement. They note that their "Dominican sample [was] an exception to [the] predictive power of language comfort on parental involvement" (p. 321) and relate this deviation to the bilingual efforts and initiatives of the school system (e.g., bilingual teachers, programs, and homework). Since relating the present finding to participation in the Puente Program is speculative, the reason why home language was not significantly associated with parental support could be an area for future research.

Economic status. In line with existing research documenting the influence of parental economic status on involvement and in keeping with my hypothesis, in this study, Broad Intervention support did vary significantly across economic status (Table 14). Students who reported higher levels of economic status (as determined by free/reduced-price lunch status) were more likely to report receiving Broad Intervention support. Additionally, although it was not a significant comparison, the pattern of means indicate that students of higher economic status (not on free/reduced-price lunch) were more likely to report receiving Intervention College Admissions support than students of lower economic status.

According to the revised theory of parent involvement developed by Walker et al. (2005), parent involvement is affected by skills and knowledge as well as time and energy. Thus, it is not surprising that students coming from households of enhanced economic means reported feeling greater levels of interventionist parent support. Parents with more economic resources may be more likely to work fewer hours and have more flexible schedules. They are also less likely than parents of minimal economic resources to be constrained by a lack of child care or transportation (Auerbach, 2006; Tinkler, 2002). For these reasons, we can surmise that parents of greater economic status have enhanced time and energy to support their children by interventionist means.

Moreover, the link between interventionist forms of support and knowledge about college is quite relevant with regard to these findings. Specifically, the occupational and income benefits of respondents' parents are no doubt related to an increased availability of social capital. That is, parents of enhanced economic means are more likely than those of fewer economic means to be connected to networks through which they can access information about college and resource providers who can help set families on the path to college (Tornatzky et al., 2002). Research reports that low-income families have less contact with schools than high-income families (Tierney, 2002), a sign of reduced social capital.

I presume that college knowledge is mediating the relation between parents' provision of interventionist forms of support and their economic status. In their large-scale survey of college knowledge among Latino parents, Tornatzky et al. (2002) found that college knowledge deficits "were significantly more evident among parents with lower incomes" (p. 1). The strong relation between economic status and interventionist forms of support in the present study is likely reflective of differential levels of college knowledge, which facilitates parents' ability to provide behavioral, knowledge-based forms of support for college attendance. Further qualitative investigation would be a necessary means of determining the accuracy of this supposition.

Summary of Results for RQ2a. Table 50 summarizes the results for the variables examined through analysis of the first part of the second research question.

RQ2b: How are student characteristics in middle school (i.e., initial categorization as high effort/high performance, low effort/high performance, high effort/low performance, or low effort/low performance but capable of higher performance) related to parents' style of providing support?

The purpose of part two of the second research question was to investigate the relation between students' past history of academic achievement/effort and parents' style of support for college, as perceived by youth. The Puente Program categorizes students into one of four categories (i.e., high effort/high performance, low effort/high performance, high effort/low performance, and low effort/low performance but capable of higher performance) upon program entry based on students' achievement and effort in eighth grade. I hypothesized that there would be a significant positive association between students' effort and performance in middle school and both noninterventionist and interventionist forms of support in light of extant theory/research pointing to bidirectional feedback (Seginer, 1983) and strong relations between students' school performance and parents' educational expectations (Goldenberg et al., 2001). Contrary to prediction, however, student characteristics in middle school were not significantly related to parenting styles of college support provision (Table 15). That is, students labeled in any one of the four categories were no more or less likely to report receiving any particular type of parental support in comparison to students with disparate labels.

Table 50

Summary of Results Pertaining to Research Question 2a

Variable	Table	Result
Level of Education		

Maternal	Table 9	• Broad Intervention support varied significantly across education levels.
		  ○ Mothers with less than a high school education were reported to have provided Broad Intervention support to a lesser extent than mothers who achieved greater levels of education.
		  ○ Students who did not know what level of education their mothers had attained or for whom the question was not applicable had significantly lower Broad Intervention scores than respondents whose mothers attended/completed a four-year college or completed a four-year college and graduate school.
		• Intervention College Admissions factor scores varied significantly across levels of education.
		  ○ Respondents whose mothers did not complete high school had significantly lower Intervention College Admissions factor scores than respondents whose mothers had attended/completed a four-year college or completed a four-year college and graduate school.

Paternal	Table 10	• Broad Intervention support varied significantly across levels of education. ○ Respondents who did not know the highest level of education their fathers had attained or for whom the question was not applicable had significantly lower Broad Intervention scores than respondents whose fathers had their high school diploma or GED. • Intervention College Admissions support varied significantly across paternal level of education.
Immigration Status		
Maternal	Table 11	• Nonintervention Purpose support varied significantly across status groups; students whose mothers were born outside the United States reported greater levels of maternal Nonintervention Purpose support.
Paternal	Table 12	• Intervention College Admissions support differed significantly across status groups; respondents whose fathers were born in the United States reported greater levels of paternal Intervention College Admissions support. • Nonintervention Purpose support varied significantly across status groups; students whose fathers were born outside the United States reported greater levels of paternal Nonintervention Purpose support.
Home Language	Table 13	• Home language was not significantly related to parenting styles of providing support.
Economic Status	Table 14	• Broad Intervention support varied significantly across economic status; respondents of higher economic means were more likely to report receiving greater levels of Broad Intervention support.

Latino cultural schema regarding learning, school success, and human talent may help to contextualize and explain this unexpected finding. According to Valdés' (1996) ethnographic research, Mexican immigrants do not necessarily consider school success to be a sign of enhanced intelligence. A student who does well in school may simply be a *machetero*, defined as "one who hacks or pounds away at his studies" (p. 133) who succeeds by relying on memory, which is considered to be *la inteligencia de los tontos*, or "the intelligence of people who are not very smart" (p. 132). Conversely, a less academically successful student may be lacking in effort and simply *no se aplico* (not apply himself). Also, learning may not come easy to some because they are more *cerrados de cabeza*, defined as "close-headed" (p. 134). According to Valdés, many Mexican immigrants tend to believe that everyone is good at something and people should pursue what they are good at. Schooling is regarded as a means of providing access to opportunity, which is considered beneficial to everyone. In light of this cultural schema, it makes sense that Puente students who had previously exhibited high motivation and achievement were no more or less likely to report receiving any given type of parent support in comparison to those Puente students with pasts indicative of low motivation and achievement.

There are several other possible explanations for this finding. On the one hand, it may be that students' middle school performance and effort occurred too long ago for parents to remember or, in some cases, were irrelevant to high school performance and effort. Many students may no longer reflect their initial categorization in terms of school achievement and effort. On the other hand, it is also possible that the Puente Program curriculum and structure serves to counteract students' school histories and set all student participants on an equal footing. Finally, perhaps the four-way classification of the Puente students is simply inaccurate. Further qualitative investigation would be a necessary means of determining the most appropriate explanation.

RQ3a: How is overall level of parent support related to student college aspirations and college enrollment intention indicators?

The purpose of part one of the third research question was to examine the relation between overall parental support, an amalgamate representation of all types of support, as perceived by students and students' individual educational aspirations and college enrollment intention indicators. Given the plethora of research regarding links between these variables, I hypothesized that overall support would have a strong direct relation to both aspirations and college enrollment intention indicators. This hypothesis was only partially confirmed.

Student aspirations. I predicted a strong direct association between overall parental support and students' college aspirations, anticipating that students who reported greater levels of support would be more likely to report aspirations to complete higher levels of education. This hypothesis was not supported; after controlling for the effects of student gender, economic status, parent immigration status, home language, and parental education, student aspirations were not significantly related to overall level of parent support (Table 19). The pattern of means, however, did reflect a trend to the effect of a positive but non-significant association between overall support levels and student aspirations. This trend aligns with a wide body of literature documenting the positive relation between various forms of parent support and student aspirations. Several researchers found that parents' educational expectations and/or aspirations for their children were among the most influential factors in students' development of their own educational aspirations (Buchmann & Dalton, 2002; Davies & Kandel, 1981; Hossler & Stage, 1992). Other investigators found direct forms of parent involvement to be among the strongest predictors of students' aspirations (Hossler et al., 1999; Qian & Blair, 1999; Smith-Maddox,

2000; Trusty, 2000). Qian and Blair (1999) analyzed the NELS:88 database in an effort to better understand the differential influences of human, financial, and social capital on students' educational aspirations across racial/ethnic groups. For Latinos in particular, parent involvement in school activities (operationalized as how often parents engaged their students in discussions about school courses and activities, topics studied, preparation for the SAT/ACT, going to college, etc.) was found to be significantly positively related to the educational aspirations of youth. Qian and Blair concluded that parent involvement, in effect, encourages the development of higher aspirations among Latino youth.

College enrollment intention indicators. Contrary to prediction, results indicate that after controlling for the effects of student gender, economic status, parent immigration status, home language, and parental education, most of the college enrollment intention indicators were not significantly related to overall level of parental support (Table 21). For instance, level of parent support was not significantly associated with whether or not participant students took the SAT/ACT or AP tests. That is, students who reported higher levels of college-related parental support were no more likely than students who reported lower levels of college-related parental support to have taken the college preparation or advanced placement tests. Also contrary to prediction, findings demonstrate that after controlling for the effects of the aforesaid demographic variables, applying to a four-year college and the type of college chosen were not significantly related to overall support. That is, students who reported higher levels of college-related support from their parents were no more likely than students who reported lower levels of college-related parental support to have applied to a four-year college or to have chosen one type of college over another. These were all unexpected findings given the plethora of research supporting a strong link between parent support and aspirations for college (Buchmann & Dalton, 2002; Davies & Kandel, 1981; Hossler et al., 1999; Hossler & Stage, 1992; Qian & Blair, 1999; Smith-Maddox, 2000; Trusty, 2000) as well as a robust association between aspirations for college and college enrollment decisions (Hossler et al., 1999; Somers et al., 2002; Sewell et al., 1980). With this said, however, acceptance to a four-year college did vary significantly across overall support levels after controlling for demographic variables. That is, students who were accepted to a four-year college reported receiving greater levels of support from their parents than students who were not accepted to a four-year college.

Holding student aspirations constant, there were no significant associations found between overall support and having taken the SAT/ACT or AP exams, applying to a four-year college, acceptance to a four-year college, or type of college chosen (Table 22). The reasons for the lack of a statistically significant association between overall parental support and most of the college enrollment intention indicators are not entirely clear, but nonetheless warrant speculation. It is possible that support from the Puente Program and the Puente counselor in particular may have more of an influence on students' college preparation decisions than overall parental support. The Puente Program counselor is the leader of the Puente Program at each school site and is responsible for ensuring that Puente students are on track for college acceptance by their senior year in high school. Counselors address academic problems, place students in college preparatory courses, and supply students with a wealth of information about college. Additionally, Puente counselors participate in classroom activities, organize field trips (e.g., college campus visits), and run the Puente Club, an extramural organization through which students can socialize and engage in college preparatory activities (Gándara & Moreno, 2002). Support from Puente counselors may be more strongly related to students' college decisions than support from students' parents due to the counselors' vast involvement in the college process and

the fact that college is the counselors' area of expertise. Students may value their counselors' input in the area of college decision making more so than that of their parents.

The only finding in support of my hypotheses was that which pointed to a significant relation between overall support and acceptance to a four-year college. The reason that this association was significant while the other associations were not could be due to the fact that, of the college enrollment intention indicators examined, acceptance to four-year college is the only variable that can be considered an index of achievement. Each of the other college enrollment intention indicators (e.g., taken SAT/ACT or AP test, applied to a four-year college, type of college chosen) are reliant on the active agency of the student as opposed to a measure of the students' achievement. While overall parent support may not significantly influence students' decisions related to preparing for, applying to, and choosing a college (perhaps because the decisions are more significantly affected by the Puente Program), findings reveal that overall parent support is strongly associated with whether or not students are accepted into a four-year institution. It is possible that acceptance into a four-year college is related to only a combination of Puente and parental support.

RQ3b: What is the relation between student aspirations and college enrollment intention indicators, and parents' propensity to offer interventionist versus noninterventionist forms of support?

The purpose of part two of the third research question was to take a close look at the relation between parents' propensity to offer support in each of the four support categories and students' college aspirations as well as the association between parents' propensity to offer support in each of the four support categories and students' college enrollment intention indicators. I hypothesized that interventionist forms of support would be significantly related to higher college aspirations and stronger college enrollment intention indicators. This hypothesis was partially substantiated.

Student aspirations. In line with my hypothesis, after controlling for the effects of student gender, economic status, parent immigration status, home language, and parents' level education, student aspirations were found to relate significantly to Intervention College Admissions support (Table 24). Although analysis did not reveal any statistically significant differences between aspiration levels, the pattern of means suggests a trend to the effect that students with aspirations to complete a four-year college and/or a graduate degree were more likely to report receiving greater levels of Intervention College Admissions support than students who aspired to earn only a two-year college degree or just attend, but not graduate from a four-year college. The pattern of means for Nonintervention Encourage support also suggests a non-significant trend to the effect that students with higher educational aspirations were more likely to report receiving Nonintervention Encourage support.

It is surprising that noninterventionist forms of support did not vary significantly across aspiration categories (after controlling for demographic variables) given that extant research reveals strong associations between students' educational aspirations and parents' educational aspirations for their children (Davies & Kandel, 1981; Hossler et al., 1999; Hossler & Stage, 1992; Teachman & Paasch, 1998). However, it is possible that the support that students receive from the Puente Program may, in essence, moderate the strength of the relation between student aspirations and noninterventionist and Broad Intervention forms of parent support. (In some cases, the Puente Program may substitute for a lack of or weak parent support.) Of the 337 Puente student participants who responded to the question gauging educational aspirations (i.e., "In an ideal world, how far in school would you want to go?"), apart from the eight students who

were unsure, all answered that they wanted to pursue some form of postsecondary education. Students have heard messages about the importance of college as well as their inherent potential to reach college throughout their four years in the Puente Program. It may be the case that students have come to embrace these messages regardless of the extent of parent noninterventionist support they have received.

It is also possible that there is a threshold effect for noninterventionist forms of parental support. That is, perhaps parental noninterventionist forms of support are simply effective with respect to encouraging a student to aspire to achieve some form of postsecondary education. Which form of postsecondary education they aspire to achieve is perhaps affected by other factors. For instance, Desmond and Turley (2009) discuss the powerful impact of valuing family interdependence, support, and obligations (i.e., attitudinal familism) on the college application rates of Latino youth. It is possible that the students who aspire to attend a two-year versus a four-year college are influenced by a desire to stay close to home, maintain a flexible schedule allowing for part-time work, and/or help support their family. It may also be that students' embracing familism at the attitudinal level are disinclined to pursue higher levels of education due to the perceived enhanced expense of tuition for their families.

Also unanticipated was that Broad Intervention support was not found to vary significantly across aspiration levels, which stands in contrast to the notion that active forms of parent involvement are strongly positively related to student aspirations (Hossler et al., 1999; Qian & Blair, 1999; Smith-Maddox, 2000; Trusty, 2000). Again it is possible that the Puente Program is providing students with enough support for the early stages of college preparation (e.g., acquiring information about certain colleges, test preparation, course selection, etc.) that Broad Intervention parental support in these areas feels unnecessary or redundant. It is also possible that the educational aspirations of students who do not receive Broad Intervention parental support do not suffer due to the information, support, and direction provided by the Puente Program with respect to the early college preparation milestones.

College enrollment intention indicators. The associations between taking the SAT/ACT and AP exams, applying to a four-year college, acceptance to a four-year college, type of college chosen, and parents' propensity to offer support in each of the four support categories were examined after controlling for the effects of student gender, economic status, parent immigration status, home language, and parental education. Overall, findings were not well aligned with my hypothesis that parents' propensity to offer interventionist support would be more significantly related to college enrollment intention indicators than parents' propensity to offer noninterventionist support.

Results demonstrate that parents' propensity to offer support in each of the four support categories were not significantly related to taking the SAT/ACT (Table 30) or Advanced Placement (AP) tests (Table 31). That is, students reporting high levels of any of the four forms of parental support (i.e., Broad Intervention, Intervention College Admissions, Nonintervention Purpose, and Nonintervention Encourage) were no more or less likely than students reporting low levels of any of the four forms of parental support to have taken the SAT/ACT or AP tests. Applying to a four-year college was also not found to be significantly related to parents' propensity to offer support in each of the four support categories (Table 32). Acceptance to a four-year college, however, was found to be significantly related to parents' propensity to offer Intervention College Admissions type support (Table 33). Type of college chosen was found to be significantly related to parents' propensity to offer Nonintervention Purpose support (Table 34). That is, respondents who chose to attend a UC reported significantly lower levels of

perceived Nonintervention Purpose support than respondents who chose to attend a community college or a CSU. This finding is surprising given the fact that the UC system schools have more stringent requirements for admission and are thus more difficult to get into (Griffin, 2009, March) than CSU system schools or community college schools. It is possible though that Puente students who are UC bound are less likely to need the general forms of support that characterize Nonintervention Purpose support. It is likely that parents perceive that their college-bound children are indeed well on their way to postsecondary enrollment and realize there is little need to push forth the point that college is important and has many benefits.

Although the lack of a significant relation between parents' propensity to offer support in any of the four categories and taking the SAT/ACT and AP exams and applying to a four-year college generally stand in contrast to my hypothesis of a positive relation between parents' propensity to offer support in each of the four support categories, especially interventionist forms, and all college enrollment intention indicators, there are several possible explanations. As surmised previously, the four forms of parent support identified may simply be associated with application to any type of postsecondary institution. The lack of an association between applying to a four-year college and parents' propensity to offer support in each of the four support categories could also be explained by the notion that parents regard two-year and four-year postsecondary institutions as equally beneficial. There may also be a family pull to attend college close to home (Desmond & Turley, 2009). With respect to taking the SAT/ACT and Advanced Placement (AP) tests, support from the Puente Program counselor may more strongly influence students than any of the four forms of support from their parents, possibly explaining the lack of a significant association between parents' propensity to offer support in each of the four support categories and these college preparation activities.

When controlling for the effects of student aspirations in addition to the demographic factors, neither taking the SAT/ACT (Table 35) or AP exams (Table 36), applying to a four-year college (Table 37), nor type of college chosen (Table 39) were not found to be significantly related to parents' propensity to offer support in each of the four support categories. Intervention College Admissions scores, however, were still found to vary significantly across acceptance groups with students who were not accepted to a four-year college reporting less Intervention College Admissions support than students who were accepted to a four-year college (Table 38). It makes sense that students whose parents were more involved in the final stages of the college admissions process (i.e., filling out college applications, editing college application essays, preparing for college interviews, completing financial aid forms, and arranging campus visits) were more likely to be accepted to a four-year college as compared to the students whose parents were less involved with tasks of the final phase of the college admissions process. The instrumental forms of support received by students are likely helpful with respect to both finishing admissions-related tasks and increasing/sustaining motivation.

RQ4: How do personal plans/expectations and parental aspirations as perceived by participant seniors compare to personal plans/expectations and parental aspirations as perceived by a sample of same grade Latino students from the western region of the United States (ELS:2002)?

The objective of the final research question was to compare the personal plans and expectations as well as the perceived parental aspirations of the present study's Puente participants with the personal plans and expectations and the perceived parental aspirations of a sample of same grade Latino students from the western region of the United States who participated in the Education Longitudinal Study of 2002 (ELS:2002). This analysis was

intended to help shed light on the generalizability of the findings from this dissertation as well as to provide information to the Puente Program about Puente students' aspirations and perceptions of parental support in relation to Latino non-Puente counterparts from a similar region of the United States. Since participants in the present study were drawn from a research-based college intervention program with a strong parental component, I predicted that they would report higher educational plans/expectations and perceived parental aspirations than the ELS:2002 participants. This prediction was confirmed.

Demographic comparison. Maternal level of education, argued to be the strongest indicator of a mother's interactions with her children (Bornstein & Bradley, 2003), was compared across the ELS:2002 western region Latino sample and the Puente sample. This proved to be the most feasible and effective way to compare and contrast the two samples and contextualize similarities and differences in personal plans/expectations and perceived parental aspirations. As can be gleaned from Table 42, the two samples differed significantly in terms of maternal level of education. The western region ELS:2002 sample had a greater percentage of mothers who graduated from college as well as a greater percentage of mothers holding master's degrees, a Ph.D.'s or another advanced degrees. Similar findings were obtained for paternal education (Table 43).

Personal expectations and plans. A greater percentage of Latino Puente study participants reported that they would pursue postsecondary education than did Latino ELS:2002 study participants (Table 44). Specifically, 20% more Latino Puente study participants than ELS:2002 study participants indicated that they would pursue some form of post-high school education. While 12% of western U.S. ELS:2002 respondents indicated that they did not plan to continue their education after high school, only 1.5% of Puente study participants conveyed the same thought. Nearly twice as many western region ELS:2002 participants reported having unknown plans regarding college than did Puente Program respondents.

Additionally, a greater percentage of Latino Puente study participants reported intentions to attend a four-year college as opposed to a two-year college or vocational/technical/trade school (Table 45). Puente study participants were close to 20% more likely to report concrete plans to attend a four-year college and 15% less likely to report plans to attend a two-year community college than were the Western region ELS:2002 seniors. Finally, in contrast to the nearly 35% of ELS:2002 western U.S. Latino respondents who reported plans to attend a vocational, technical, or trade school, only 5.8% of Latino Puente participants in the current sample reported the same intentions.

These findings are well aligned with my hypothesis and extant literature documenting the potential positive effects of participation in college preparation programs in general and the Puente Program specifically on the development of college plans. For instance, in seeking to pinpoint the factors most important to students' transition to college through an analysis of at-risk students in the NELS:88 database, Horn and Chen (1999) found that participation in college preparation programs was predictive of enrollment in a four-year college. With respect to the Puente Program in particular, research points to an overwhelmingly powerful effect of participation on college aspirations and attendance. Gándara (2002) compared 1000 Puente students to 1000 non-Puente participants (500 Latinos) in 18 California schools as well as examined 75 Puente and non-Puente student matched controls with baseline data. Findings from the statewide survey data indicated that compared to non-Puente students, Puente students were more likely to aspire to attend four-year colleges. Also compelling, outcomes from the matched control investigation demonstrated that when compared to non-Puente students, Puente students

were more likely to attend four-year colleges. The matched case study data verifies the findings from the statewide surveys, demonstrating that Puente students are better prepared for and more likely to apply to and attend four-year colleges than non-Puente students who enter high school with similar grades and test scores.

While it is not known how many of the western region ELS:2002 Latino students had participated in a college preparation program, it is likely that most of them did not receive such intervention. In an analysis of the High School and Beyond data, Adelman (2000) estimated that no more than 5.3% of Latino students participate in intervention programs at any level of their secondary school education.

While the results of the present study do suggest that the Puente Program positively influences personal expectations and academic plans, it is important to remember that correlation does not imply causation. It is quite possible that these differences between the ELS:2002 and Puente samples can be attributed to the likelihood that parents who encourage their children to participate in college preparation programs are more college-oriented than those who do not. With regards to the Puente Program, parent participation is a condition of student participation. Parents are asked to commit to participation in workshops and other program functions as well as encourage their children to complete the four-year program (Gándara & Bial, 2001). This action demonstrates a strong commitment to a college education.

Although the results correspond with my hypothesis and existing research, they are surprising given the comparison of maternal education levels across the two samples. The Puente students in the present study maintained higher educational expectations and more concrete plans to attend college than the ELS:2002 sample studied despite having mothers with significantly less education. In light of the predictive relation between maternal education and maternal involvement (Bornstein & Bradley, 2003) and the strong association of parent involvement/support and students' predisposition to attend college (Buchmann & Dalton, 2002; Eccles et al., 2004; Glick & White, 2004; Hossler et al., 1999; Hossler & Stage, 1992; Paulsen, 1990; Qian & Blair, 1999; Smith-Maddox, 2000), this finding is clearly indicative of a strong positive relation between participation in the Puente Program and maintaining strong college-related expectations and plans.

Perceived parental aspirations and desires. A comparison of perceived maternal aspirations across samples revealed a significant relationship between sample and maternal level of educational aspirations (Table 46). Approximately 15% more Latino Puente participants from the current study than western region Latino ELS:2002 participants perceived that their mothers wanted them to obtain a doctorate or other advanced degree. Likewise, a comparison of the perceived paternal aspirations across samples revealed a significant relation between sample and paternal level of educational aspirations (Table 48). Thirteen percent more Latino Puente seniors who participated in the current study than Latino ELS:2002 western region participants reported that their fathers wanted them to obtain a doctorate or other advanced degree.

A similar pattern emerged when analyzing perceived maternal and paternal desires for immediate post-high school plans across samples (Tables 47 and 49, respectively). A significantly greater percentage of Latino Puente study participants (about 17%) as compared to western region Latino ELS:2002 participants reported that their mothers wanted them to attend college rather than acquire a job, enter an apprenticeship, join the military, or get married right after high school. Similarly, a significantly greater percentage of Latino Puente study participants (about 12%) as compared to western region Latino ELS:2002 participants reported

that their fathers wanted them to attend college rather than acquire a job, enter an apprenticeship, join the military, or get married right after high school.

Again, these results are well aligned with my hypothesis. Gándara and Moreno (2002) report that, "the Puente model was designed according to the belief that in order for a program to be effective for Latino students, it would have to incorporate the surrounding community into its fabric: It could not exist successfully without substantial links to family and community" (p. 470). The Puente Program collaborates with and informs parents so that they are able to support their children on the pathway to postsecondary education. This starts early—upon program acceptance. As mentioned previously, as part of the selection process, parents commit themselves to workshop and function participation and promise to do everything to ensure that their child completes the Puente Program (Gándara & Bial, 2001). Parents are involved in a variety of ways. Counselors remain in contact with parents via individual meetings and Puente events in an effort to inform them about college opportunities. Throughout the high school years, parent workshops are held to educate parents about college readiness and the college admissions process. Parent nights are described as "family affairs with food, informal conversation, presentations in both Spanish and English, and materials and information that are of critical importance to these parents, such as information about financial aid or special programs that can help both students and families" (Gándara & Moreno, 2002, p. 470). Parents are even integrated into the ninth and tenth grade English class curriculum by means of assignments involving parents as sources for writing research.

In light of the Puente Program's strong commitment to parent involvement, it makes a great deal of sense that Puente students were more likely than ELS:2002 students to perceive that their parents have higher educational aspirations for them and stronger desires for them to go straight to college after high school. Through all the aforementioned parent components (e.g., counselor meetings, parent workshops, school assignments), the Puente Program is, in effect, bridging communication about college between students and parents. As Puente helps to facilitate conversations about college between youth and their parents, I surmise that Puente students are more likely than the ELS:2002 students to have been directly exposed to messages about aspirations and post-high school goals from their parents.

Despite their concordance with my expectations, again, these results are indeed surprising given the fact that the mothers of the Puente students were significantly less educated than the mothers of the ELS:2002 students studied. In light of the well-researched finding that maternal education is the strongest predictor of maternal involvement, one would expect the ELS:2002 western region Latino students to report higher perceived maternal aspirations for them and stronger maternal desires for them to go straight to college after high school. The fact that the opposite was found truly attests to remarkable nature of this finding.

Limitations

There are several methodological limitations to consider when interpreting the results of this dissertation. One methodological limitation worth noting is the reliance on self-report measures as the primary gauge of background information, such as free/reduced-price lunch status, parents' educational background, and parents' immigration status. Employing self-report measures likely accounts for the missing data in relation to these variables. Specifically, 5.3% and 8% of students indicated that they did not know their mother's or father's highest levels of education, respectively. Surprisingly, 3.6% and 6.3% of students did not know whether their mother or father, respectively, was born in the United States. And, 6.6% of students indicated that they were unsure as to whether or not they received free/reduced-price lunch.

The reliance on self-report as the sole measure of parental support may also be problematic. Students' responses to survey questions could have been influenced by difficulties recalling the frequencies of parental support behaviors/messages or a misinterpretation of survey questions. Additionally, students may have responded to social desirability biases, answering survey questions in a manner thought to be the most socially acceptable. Since the Perceived Support and Aspirations Survey was not confidential and pertained to potentially sensitive subject matter—the family, responses may reflect a positively skewed view of reality. The inclusion of observational data or additional information from parents to corroborate survey data and provide supporting evidence could have bolstered study methodology. A mixed-methods approach to the measurement of parental support for college may have strengthened the conclusions regarding the effects of parental support on students' college aspirations and enrollment intention indicators. Also ideal would have been the presence of qualitative data to provide deeper descriptions of the students' feelings of support. With this said, however, there is a strong argument to be made for student perceptions being the most important factor to consider in this present investigation. Grusec and Davidov (2010), for instance, point to children's perceptions as important mechanisms linking parent behavior and child outcomes.

Other limitations have to do with both internal and external validity. The internal validity of the study is limited due to the fact that no variables were manipulated and thus, no causal conclusions can be made from these data. It is quite possible that confounding variables not investigated or controlled for contributed to the correlations noted. For instance, the finding that students with more educated parents reported receiving greater levels of Broad Intervention support does not indicate that being more educated causes parents to provide more Broad Interventionist support. Rather, a confounding variable, such as parents' time availability could explain this relation (e.g., parents who are more educated are likely to have fewer jobs with more flexible work schedules enabling them to spend more time with their children, supporting them via Broad Interventionist means). Causal inferences cannot be made even where control variables (e.g., student gender, economic status, parent immigration status, home language, and parental education) exist since, in this observational study, it was not possible to account for all possible underlying variables.

With respect to limited external validity, the findings from the present study can only be generalized to a similar group of students. Including a sample of students who were not Puente Program participants would have provided counter evidence to firmly establish that the influence of parental support on aspirations and the college enrollment intention indicators examined had nothing to do with participation in a specialized college intervention program. Drawing the sample solely from the Puente Program limited the representativeness of the respondents. Had the sample included Latino students who were not involved in any sort of college preparation program, I surmise that a smaller percentage of respondents would have reported high levels of parent support, strong college aspirations, and engagement in specified college preparation activities. With this said, however, I did make a strong attempt to examine the extent to which the present study's findings were relevant to a larger more representative group via a comparison with ELS:2002 data.

Finally, if allotted more time, it would have been ideal to follow-up with participant students. Plans can change due to various life circumstances. The strength of the present study's findings would have been enhanced had actualized postsecondary school paths been noted.

Implications

Numerous college preparation programs, spanning the federal, state, university, and local levels, have been established throughout the past few decades to provide low-income, minority, and underrepresented adolescents with support for college access. Specifically, the programs aim to engender and shape in youth the skills, knowledge, confidence, college-going identity, and aspirations they need to transition from high school to college. In other words, preparation programs are designed to help students bridge pathways to college (Denner, Cooper, Dunbar, & Lopez, 2005). Although they are similar in their intent to significantly increase the rates at which participants graduate from high school and enroll in college, the programs are diverse in form and design, including the way in which they involve families. The present study has implications for the familial or parental components of college intervention programs such as these.

Through their qualitative review of the research, Tierney, Colyar, and Corwin (2003) synthesized the fundamental elements of well-functioning college preparation programs. The authors highlighted the important role of parent involvement in leading to increased college enrollment rates, supporting the mission of college preparation programs. Tierney (2002) states that "current research offers a high degree of agreement about the importance of familial involvement in educational practices in general and college preparation in particular" (p. 591). While researchers agree that incorporating families and parents in meaningful ways can improve program effectiveness (Tierney & Hagedorn, 2002), generally very little is done by college preparation programs to break down the obstacles and incorporate parents as an important programmatic component (Tierney, 2002). Illustrating this point, a national study conducted between 1999 and 2000, which investigated 1110 programs nationwide, found that 69% of them entailed a parental component. Of this 69%, only a little more than a fifth of these programs mandated parental involvement (Swail & Perna, 2002). For the programs that do involve parents, what qualifies as parent involvement may be minimal and most programs that incorporate parents do not take the cultural background of the participants into account. Tierney and Auerbach note in their 2005 review, "Based on the research reviewed here and notions of cultural integrity, one expects that most college preparation programs geared to cultural and linguistic minorities will feature parent programs that are culturally specific, or built from the ground up incorporating the assumptions of the participants" (p. 44). One program that does utilize the invaluable resource that parents are by incorporating family-centered activities into its curriculum is the Puente Program.

The Puente Program aims to enhance students' educational aspirations and college participation rates, in part, by facilitating parental support for college attendance. By looking closely at the Puente Program, we begin to better understand the ways by which Latino parents are associated with the academic trajectories of their children. Information gleaned from the present study can be used to further strengthen the Puente Program's parent curriculum and the working relationships between parents and both teachers and counselors.

The present study highlights positive and significant associations between parents' propensity to offer behavioral-based forms of parent support during the final stages of the college preparation process and acceptance into a four-year college. The results of this study also suggest that less educated, lower income parents may need more targeted intervention in order to adopt a behavior-based style of support. That is, the present study suggests that it is important to carefully consider parent profiles and work closely with less educated, lower income parents.

In addition to identifying which parents should be targeted by college preparation programs like the Puente Program, the present study pinpoints the type of information that should be conveyed. In light of the considerable evidence indicating that Latino parents deeply value education and generally want their children to go to college (Delgado-Gaitan, 1992; Goldenberg et al., 2001; Okagaki & Frensch, 1998; Pew Hispanic Center/Kaiser Family Foundation, 2004; Stevenson et al., 1990; Valencia & Black, 2002; Villenas & Deyhle, 1999), programs should explicitly advise parents of their crucial role and the strong research-based link between behavioral-based support and students' four-year college acceptance rates. In addition to simply informing parents of the importance of specific types of support, it is crucial to give them the tools necessary (i.e., college knowledge) to provide this support.

The most basic point that programs should try to communicate to parents is the notion of a pathway to college access. That is, programs must convey to parents that there are steps that need to be taken in order for opportunities to be available to one's children. Early on, parents should be encouraged to maintain a relationship with their children's school counselor, acquire information about colleges, and stay well-informed about their children's test preparation and course selection. Later, parents should be encouraged to help their children with interview preparation, personal essay editing, and application and financial aid form completion. Programs may be more successful if they maintain a developmental approach when working with parents, beginning with basic information and culminating with more advanced information provision.

College preparation programs can bolster parents' support via encouragement and information provision in both formal and informal ways. Information can be delivered to parents in the form of bilingual meetings, study groups, and handouts. Latino parents may also respond well to the personal dimensions that guest speaker narratives offer. Specifically, listening to presentations from Latino college students or from the parents of students who have successfully made the transition to postsecondary education might be particularly beneficial to Latino parents. Introducing Latino parents to those of similar backgrounds who have sent their children to college is a way to increase both social and cultural capital. Information and inspiration offered via these means may lead parents to begin supporting their children along the pathway to college in an action-oriented manner.

Findings from the present study not only highlight the importance of interventionist forms of support, but also emphasize the value of noninterventionist forms of support. Specifically, results reveal a strong relation between overall parental support and acceptance to a four-year college. It is important to acknowledge the value of parents' talking to their children about the purpose of college and encouraging their children to maintain high academic aspirations. In addition to promoting these culturally valued forms of support, acknowledgement of the importance of non-behavioral forms of support can help offset the negative perceptions that many teachers and school personnel may have about the degree to which Latino parents care about their children's education (Tinkler, 2002).

While the results of the present study suggest implications and recommendations for the Puente Program specifically, the results also identify several strengths of the Puente Program. As evidenced by the comparison of Puente student aspirations to ELS:2002 student aspirations, the Puente Program is associated with enhanced educational plans/expectations among their students. This finding holds true despite lower levels of parental education among the Puente Program participants as compared to the ELS:2002 participants. In light of the apparent success that the Puente Program has had in incorporating parental involvement into their curriculum, it

can serve as a model to other college preparation programs working with Latino youth and their families.

Summary

This dissertation was based on the fundamental assumption that the educational trajectories of Latino youth are influenced by the complex relationships between the youth and their parents. To explore and substantiate this basic assumption, I examined the association of particular styles of perceived parental support for college attendance to students' postsecondary educational aspirations and enrollment intentions. In particular, I sought to answer four main research questions. Table 51 outlines key findings pertaining to each of the research questions.

Using exploratory factor analysis, I found that perceived support for college attendance could be represented in terms of four underlying factors, or styles. The Broad Intervention and Intervention College Admissions factors reflected similar types of behavioral-based support centered on helping children actively reach milestones along the path to college. More specifically, the Broad Intervention factor contained items that pertained to behavioral-based support for college focused on the early steps of college preparation (e.g., speaking with the school counselor, acquiring information about certain colleges, test preparation, course selection, etc.). The Intervention College Admissions factor contained items that pertained to behavioral-based support centered on the final steps of college preparation (e.g., completing applications, editing essays, preparing for interviews, completing financial aid forms). The Nonintervention Purpose and Nonintervention Encourage factors represented types of noninterventionist support aimed at encouraging children to pursue postsecondary education. Specifically, the Nonintervention Purpose factor contained items that pertained to parents' non-behavioral support for college focused on conveying to students the importance and purpose of postsecondary education. The Nonintervention Encourage factor contained items that pertained to parents' non-behavioral support for college focused on providing verbal encouragement to pursue a college education that centered on the active agency of the student him/herself.

I explored the association of various parent and student characteristics to the four distinct support styles. Results revealed that parents with stronger educational backgrounds and of enhanced economic means tended to provide interventionist forms of support to their children to a greater degree than did less educated, lower income parents. The relation between immigration status and support style proved more complex; parents born outside of the United States were more likely to provide Nonintervention Purpose support, while fathers born in the United States were more likely to provide Intervention College Admissions support. Neither home language nor students' eighth grade effort/performance was significantly related to any of the four support styles.

The information gained from the first two research questions provided a strong foundation of information from which to analyze the third research question, which constituted the core of my research. An analysis of the relation of parent support to students' aspirations and college enrollment intentions revealed that overall parent support was associated at the level of a trend with student aspirations. Additionally, overall support was positively and significantly related to acceptance into a four-year college. While all forms of parent support proved to be important, the results clearly pinpointed interventionist forms of support in the final stages of the college preparation process to be the most crucial to students. Parents' propensity to offer Intervention College Admissions support (e.g., help with applications, facilitate trips to college campuses, provide assistance with interview preparation) during the final stages of the college

Table 51
Summary of Results for all Research Questions

Research Question	Hypothesis	Result
RQ1. What conceptual dimensions underlie the general construct of parental support as perceived by Latino students?	Analysis would reveal two unique dimensions of perceived support distinguished by extent of behavioral involvement: interventionist and noninterventionist.	Exploratory factor analysis yielded four factors related conceptually to the two anticipated domains: Broad Intervention, Nonintervention Purpose, Intervention College Admissions, and Nonintervention Encourage. See Tables 5, 6, and 7.
RQ2a. How are parent characteristics (i.e., educational background, immigrant status, home language, and economic status) related to parents' style of providing support?	Analysis would reveal positive associations between interventionist support and being born in the U.S., having higher levels of education, English proficiency, and economic status. Parent characteristics would not be significantly related to noninterventionist support.	See Table 50 for summary of results pertaining to RQ2a.
RQ2b. How are student characteristics in middle school related to parents' style of providing support?	Analysis would reveal a positive association between student effort and achievement in middle school and both types of perceived parental support.	Student characteristics in middle school were not significantly related to parenting styles of support provision. See Table 15.
RQ3a: How is overall level of parent support related to student college aspirations and college enrollment intention indicators?	Latino students who felt more supported by their parents overall would be more likely to report aspirations to go to college and report concrete plans and intentions to go to a four-year college as opposed to a two-year college or no college.	Student aspirations were not significantly related to parenting styles of support—see Table 19. Of the college enrollment intention indicators, only acceptance to a four-year college was significantly related to overall parental support (after controlling for demographic variables but not student aspirations). See Table 21.
RQ3b. What is the relation between student aspirations and college enrollment intention indicators, and parents' propensity to offer interventionist versus noninterventionist forms of support?	Parents' propensity to offer interventionist support would be more strongly related to students' aspirations and college enrollment intention indicators than parents' propensity to offer noninterventionist support.	Parents' propensity to offer Intervention College Admissions support was found to vary significantly across aspiration categories (Table 24). Parents' propensity to offer Intervention College Admissions support varied significantly across acceptance groups; respondents who were not accepted to a four-year college had significantly lower scores than respondents who were accepted. See Table 38.
RQ4. How do personal plans/expectations and parental aspirations as perceived by participant seniors compare to personal plans/expectations and parental aspirations as perceived by a sample of same grade Latino students from the western region of the United States (ELS:2002)?	Participants in the present study would report higher educational plans/expectations and perceived parental aspirations than the ELS:2002 participants.	Hypothesis confirmed. See Tables 44 to 49.

preparation process was found to vary significantly across aspiration categories and four-year college acceptance levels. That is, students who reported receiving greater levels of action-oriented interventionist support in the final stages of the college admissions process were more likely to also report higher educational aspirations and be accepted to a four-year college than students who reported receiving less behavioral-based support in the final stages of the college preparation process.

The final research question, aimed to explore data generalizability, compared student plans and expectations as well as parent aspirations across distinct student samples. Results revealed that the Puente students participating in the present study articulated significantly higher educational plans/expectations and perceived significantly greater parent aspirations than same-age Latino students from the western region of the United States who participated in the Educational Longitudinal Study of 2002. This significant finding held true despite Puente parents being significantly less educated than the parents of the ELS:2002 participants.

Conclusion

Social scientists assert that families in the United States generally adhere to the modern-day belief that everyone should obtain a postsecondary education, buying into the notion that "a college education is…considered a social escalator…in American society" (Hossler et al., 1999, p. 5). It is therefore not surprising that more students than ever before aim to attain a college education. These high ambitions span racial and economic lines (Venezia, Kirst, & Antonio, 2003). Although the relation between educational aspirations and attainment is well established in the literature (Hossler et al., 1999; Sewell et al., 1980; Sewell & Hauser, 1993; Somers et al., 2002; Trusty, 2000) there remains a noteworthy discrepancy between the number of students who report aspiring to higher education and the number who actually attain a postsecondary education (Conley, 2005; Gibbons, Borders, Wiles, Stephan, & Davis, 2006), especially among Latino youth who transition to postsecondary education at lower rates than youth from any other racial/ethnic group (KewalRamani et al., 2007).

There is no shortage of evidence pointing to the importance of parental support for students as they progress along the path to college. While the present study points to the importance of all types of parent support, it clearly demonstrates that action-oriented, behaviorally-based, interventionist forms of parental support are particularly helpful for Latino students. The results of this study suggest that interventionist forms of support in the final stages of the college preparation process are not only strongly associated with students' maintenance of high aspirations during their senior year in high school, but also significantly related to their acceptance into a four-year college.

In light of these findings, it is clear that educators and other professionals must strive to assist Latino parents, especially those who are low-income and less educated, in supporting their children by interventionist means in the final stages along the road to college. Perhaps supporting these parents in their efforts to support their children will narrow the gap between the number of Latino students who aspire to attend college and the number of Latino students who actually attend. Assisting Latino parents in supporting their children is arguably crucial to the future of the educational topography of the United States.

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Appendix A
Parent Informational Letter

CPHS#2009-7-21
APPROVED 10/09/09
EXPIRES 08/06/10

UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO

SAN FRANCISCO • SANTA BARBARA • SANTA CRUZ

Dear Parent/Guardian,

My name is Jessica Weiss Cummins and I am a doctoral student in the Graduate School of Education at the University of California, Berkeley, working with my faculty advisor Professor Susan Holloway. I would like to invite your son or daughter to take part in my research study looking at the association between students' feelings of support and their postsecondary aspirations and educational outcomes. I will be giving a short survey to all twelfth grade Puente students at your child's high school. The survey will take about 20 minutes to complete.

Your child's responses to the surveys will be confidential. No one at the school will be provided with individual student's answers. However, whether or not your child participates in this study will not have any effect on his or her grades at school or standing in the Puente Program.

The Puente Program and the Puente counselor at your child's high school has agreed to allow these surveys to be given to all the twelfth grade Puente students. Students who do not participate will be allowed to read or work on homework assignments while other students work on the survey. Your child's participation in this research is entirely voluntary. He or she may refuse to answer any survey questions they wish.

There are no known risks to your child from participating in this research apart from the minimal risk that is a breach of confidentiality. All precautions will be taken to ensure confidentiality is maintained. All students will be linked to unidentifiable codes and the list linking codes to student names will be stored in a locked file cabinet. Only I will have access to individual responses to surveys. Data shared with the Puente Program and in any reports of this research will be shared in de-identified aggregated format.

Participating in this research will not directly benefit your child's education. However, your child's participation will help educators understand how students think about postsecondary planning and the factors that influence their aspiration formation and enrollment decisions.

If you have any questions at all about this study, please feel free to call me at 650-380-1177, write me at 4511 Tolman Hall, School of Education, UC Berkeley, Berkeley, CA 94720, or email me at jessicaweiss@berkeley.edu.

If you have any questions about your child's rights or treatment as a participant in this research project please contact the University of California at Berkeley's Committee for the Protection of Human Subjects at 510-642-7461 or subjects@berkeley.edu

Thank you for your consideration.

Sincerely,

Jessica Weiss Cummins, M.A.
UC Berkeley graduate student

CPHS#2009-7-21
APPROVED 10/09/09
EXPIRES 08/06/10

UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO

SAN FRANCISCO • SANTA BARBARA • SANTA CRUZ

Querido padre/tutor,

Mi nombre es Jessica Weiss Cummins y soy una estudiante de doctorado en la Escuela de Graduados de Educación de la Universidad de California, Berkeley, trabajando con mi asesor de la facultad, Profesora Susan Holloway. Me gustaría invitar a su hijo o hija a participar en mi estudio que investiga la relación entre el apoyo que los estudiantes sienten y sus planes después de la escuela secundaria, con sus resultados educativos. Voy a pasar una breve encuesta a todos los estudiantes de Puente de duodécimo grado en el colegio de su hijo. La encuesta tomará aproximadamente 20 minutos.

Las respuestas de sus hijos a las encuestas serán confidenciales. Nadie en la escuela recibirá las respuestas de estudiantes individuales. Sin embargo, la participación de su hijo en esta investigación no tendrá ningún efecto sobre sus calificaciones en la escuela o su posición en el Programa Puente.

El Programa Puente y el consejero Puente de su hijo en la escuela secundaria han accedido a que estas encuestas sean dadas a todos los estudiantes de Puente de duodécimo grado. A los estudiantes que no participen se les permitirá leer o trabajar en otras tareas mientras los otros estudiantes trabajan en la encuesta. La participación de su hijo en esta investigación es totalmente voluntaria. Él o ella puede negarse a responder a todas las preguntas de la encuesta si así lo desea.

No hay riesgos conocidos para su hijo por participar en esta investigación, aparte de que hay un riesgo mínimo de una violación de la confidencialidad. Todas las precauciones serán adoptadas para garantizar la confidencialidad. Todos los estudiantes estarán vinculados a unos códigos secretos y la lista de la vinculación de los códigos y los nombres de estudiantes se almacenará en un archivador bajo llave. Solamente yo voy a tener acceso a las respuestas individuales de las encuestas. Datos compartidos con el Programa Puente y en los informes de esta investigación serán compartidos en un formato no identificable.

La participación en esta investigación no beneficiará directamente a la educación de su hijo. Sin embargo, la participación de su hijo ayudará a los educadores a comprender cómo piensan los estudiantes sobre los planes post-secundarios y los factores que influyen sus aspiraciones y las decisiones de inscripción.

Si usted tiene alguna pregunta sobre este estudio, no dude en llamarme al 650-380-1177, o en escribirme a Tolman en 4511 Hall de la Facultad de Educación, Universidad de California en Berkeley, Berkeley, CA 94720, o en enviarme un correo electrónico a jessicaweiss@berkeley.edu.

Si usted tiene alguna pregunta sobre los derechos de su hijo o su tratamiento como participante en este proyecto de investigación, usted puede ponerse en contacto con la Universidad de California en Berkeley del Comité para la Protección de Sujetos Humanos al 510-642-7461 o subjects@berkeley.edu.

Gracias por su consideración.
Atentamente,

Jessica Weiss Cummins, M.A.
UC Berkeley estudiante de doctorado

Appendix B
Recruitment Script

Lead Investigator: Jessica Weiss Cummins
CPHS #: 2009-7-21

RECRUITMENT SCRIPT

Note: This recruitment script will be read to students prior to giving them the Perceived Support and Aspirations Survey in the fall of 2009. It will either be read to the students by the Lead Investigator if she is able to be present during survey administration or by the Puente counselor at each individual school site.

If read by Lead Investigator:

I am a UC Berkeley graduate student in the School of Education studying how important people in students' lives affect their educational aspirations and decisions. In the field of education, there is a lot that researchers have yet to understand about how students make educational plans and the factors that influence the development of these plans. Specifically, there is much to learn about the effects of family support on educational decisions. Filling in the gaps in the research can help inform educational public policy and the development of programs like the Puente Program. High school students like you can make an enormous contribution to this area of research.

The survey will take about 15 to 20 minutes to complete and is entirely voluntary. If you don't want to complete the survey, it will not affect your standing in the Puente Program or your grades in any way. If you do not want to complete the survey you can spend the next 15 to 20 minutes working on homework assignments, reading, or engaging in another quiet activity.

Each of you has received a letter describing the research goals and the benefits and risks of participation. This letter also appears on the first screen of the electronic survey. Please carefully read this letter and click "I agree" to the first question on the electronic survey if you agree to participate in this research. You may keep the letter which has my contact information should you have any questions later on.

For those of you who would like to participate, please know that all your answers to this survey are confidential. Your specific answers will not be shared with anyone in your school or the Puente program. Once you submit your survey, your answers will be stored securely for only myself to view.

Thank you all so much for your time.

If read by the Puente counselor:

This is a survey that was created by a UC Berkeley graduate student in the School of Education studying how important people in students' lives affect their educational aspirations and decisions. In the field of education, there is a lot that researchers have yet to understand about how students make educational plans and the factors that influence the development of these plans. Specifically, there is much to learn about the effects of family support on educational decisions. Filling in the gaps in the research can help inform educational public policy and the development of programs like the Puente Program. High school students like you can make an enormous contribution to this area of research.

The survey will take about 15 to 20 minutes to complete and is entirely voluntary. If you don't want to complete the survey, it will not affect your standing in the Puente Program or your grades in any way. If you do not want to fill out the survey you can spend the next 15 to 20 minutes working on homework assignments, reading, or engaging in another quiet activity.

Each of you has received a letter describing the research goals and the benefits and risks of participation. This letter also appears on the first screen of the electronic survey. Please carefully read this letter and click "I agree" to the first question on the electronic survey if you agree to participate in this research.

Appendix C
Perceived Support and Aspirations Survey

PERCEIVED SUPPORT AND ASPIRATIONS SURVEY

Informational Letter/Consent-Assent to Participation

UNIVERSITY OF CALIFORNIA, BERKELEY

Dear Student,

My name is Jessica Weiss Cummins and I would like to invite you to participate in a research study that I am conducting as a graduate student in the Graduate School of Education at the University of California, Berkeley. I am working under the supervision of Professor Susan Holloway, studying the relationship between feelings of support and college-related aspirations and decisions. Participation in the study entails completing a short survey that should take no longer than 20 minutes of your time.

Your responses to the survey will be confidential. No one at the school or in the Puente Program will be provided with individual student's answers.

Your participation is entirely voluntary. Whether or not you choose to participate will have no effect on your grades or standing in school or the Puente Program. If you do not want to participate you will be allowed to read or work on homework assignments while other students work on the survey. Your parent(s)/guardian(s) have been notified of this survey administration through an informational letter sent home. You are entitled to refuse to take part in the research or may refuse to answer any survey questions that you wish.

There are no known risks to you from participating in this research apart from the minimal risk that is a breach of confidentiality. All precautions will be taken to ensure confidentiality is maintained. All students will be linked to unidentifiable codes and the list linking codes to student names will be stored in a locked file cabinet. Only I will have access to individual responses to surveys. Data shared with the Puente Program and in any reports of this research will be shared in an unidentifiable manner.

Participating in this research will not directly benefit your education. However, your participation will help educators understand how students think about postsecondary planning and the factors that influence their aspiration formation and enrollment decisions.

If you have any questions at all about this study at any point, please feel free to call me at 650-380-1177, write me at 4511 Tolman Hall, School of Education, UC Berkeley, Berkeley, CA 94720, or email me at jessicaweiss@berkeley.edu. If you have any questions about your treatment as a participant in this research project please contact the University of California at Berkeley's Committee for the Protection of Human Subjects at 510-642-7461 or subjects@berkeley.edu.

If you agree to the statement below, please choose "I agree" and you will be directed to the survey questions. If you do not agree to the below statement, please choose "I do not agree" and you will be redirected away from this study.

Thank you for your consideration,
Sincerely,
Jessica Weiss Cummins
Graduate Student, UC Berkeley

∗ 1. I have read and understood the above informational letter and I agree to participate in this research.

- ○ I agree
- ○ I do not agree

PERCEIVED SUPPORT AND ASPIRATIONS SURVEY

Confidential Information

As a reminder, your responses to this survey are entirely confidential. No one at your school or in the Puente Program will be provided with your individual answers.

*** 2. What is your name?**

First Name:

Last Name:

*** 3. What is your date of birth (MM/DD/YYYY)?**

*** 4. What high school do you attend?**

PERCEIVED SUPPORT AND ASPIRATIONS SURVEY

Aspirations and Planning Questions

This is NOT A TEST. It is hoped that you will answer every question, but you may skip any question you do not wish to answer.

Please Note: "Parents," "Mother," and "Father" refer to the parent(s), guardian(s), or stepparent(s) with whom you live most of the time. Guardians may include foster parents, legal guardians, or other older adults living in your household, such as grandparents, who are responsible for you.

5. As things stand now, how far in school do you think you will get?

- ○ Less than high school graduation
- ○ GED or other equivalency only
- ○ High school graduation only
- ○ Attend or complete a 1- or 2-year program in a community college or vocational school
- ○ Attend college, but not complete a 4- or 5-year degree
- ○ Graduate from college (4- or 5-year degree)
- ○ Obtain a master's degree or equivalent
- ○ Obtain a Ph.D., M.D., or other advanced degree
- ○ Don't know

6. How far in school do you think your mother (or female guardian) wants you to go?

- ○ Less than high school graduation
- ○ GED or other equivalency only
- ○ High school graduation only
- ○ Attend or complete a 1- or 2-year program in a community college or vocational school
- ○ Attend college, but not complete a 4- or 5-year degree
- ○ Graduate from college (4- or 5-year degree)
- ○ Obtain a master's degree or equivalent
- ○ Obtain a Ph.D., M.D., or other advanced degree
- ○ Don't know

PERCEIVED SUPPORT AND ASPIRATIONS SURVEY

7. How far in school do you think your father (or male guardian) wants you to go?

- ○ Less than high school graduation
- ○ GED or other equivalency only
- ○ High school graduation only
- ○ Attend or complete a 1- or 2-year program in a community college or vocational school
- ○ Attend college, but not complete a 4- or 5-year degree
- ○ Graduate from college (4- or 5-year degree)
- ○ Obtain a master's degree or equivalent
- ○ Obtain a Ph.D., M.D., or other advanced degree
- ○ Don't know
- ○ Does not apply

8. What do the following people think is the most important thing for you to do right after high school?

	Does not apply	Go to college	Get a full-time job	Vocational, technical or apprenticeship program	Enter military	Get married	He thinks I should do what I want	Don't know
Your mother (or female guardian)	○	○	○	○	○	○	○	○
Your father (or male guardian)	○	○	○	○	○	○	○	○

9. Do you plan to go on to school right after high school?

- ○ Yes
- ○ No
- ○ Don't know

PERCEIVED SUPPORT AND ASPIRATIONS SURVEY

10. Which of the following are reasons why you have decided NOT to continue your education right after high school?

- ☐ You don't like school
- ☐ Your grades aren't high enough
- ☐ Your college admission scores weren't high enough
- ☐ You won't need more education for the career you want
- ☐ You can't afford to go on to school
- ☐ You haven't taken the right courses
- ☐ No one in your family has ever gone on to school after high school
- ☐ You plan to join the military
- ☐ You'd rather work and make money than go to school
- ☐ You don't feel that going on to school is important
- ☐ Your counselor or teachers recommend you work rather than continue your education
- ☐ You need to help support your family

PERCEIVED SUPPORT AND ASPIRATIONS SURVEY

11. Do you plan to continue your education at some time in the future?

- ○ No, you don't plan to continue your education after high school
- ○ Yes, right after high school
- ○ Yes, after staying out of school for up to one year
- ○ Yes, after staying out of school for over a year
- ○ Don't know

PERCEIVED SUPPORT AND ASPIRATIONS SURVEY

12. Which of the following will you most likely attend?

- ○ Four-year college or university
- ○ Two-year community college
- ○ Vocational, technical, or trade school

PERCEIVED SUPPORT AND ASPIRATIONS SURVEY

Perceived Support Questions

13. How often do your parents do the following?

	Often	Sometimes	Rarely	Never
My parents encourage me to have educational goals beyond high school.	C	C	C	C
My parents contact colleges for information.	C	C	C	C
My parents contact my school counselor and/or teachers to get advice about college for me.	C	C	C	C
My parents tell me that I can be successful in college.	C	C	C	C
My parents review publications, materials, or internet pages about specific colleges.	C	C	C	C
My parents tell me that I should study and work hard so that I can get into college.	C	C	C	C
My parents and I talk about which high school courses I should take to GET INTO college.	C	C	C	C
My parents tell me that I should take AP exams.	C	C	C	C
My parents and I discuss plans and preparation for the SAT and/or ACT tests.	C	C	C	C
My parents and I talk about what I plan to study in college.	C	C	C	C
My parents encourage me to take advantage of the help I receive from the Puente Program.	C	C	C	C
My parents give me fewer chores/household duties so that I can have more time to focus on school.	C	C	C	C
When I am struggling in class, my parents offer to help me whenever they can by sitting down with me or finding me help (e.g., tutoring).	C	C	C	C
My parents help me access college applications.	C	C	C	C

14. Please indicate to what extent you agree with the following statements.

	Strongly Agree	Agree	Disagree	Strongly Disagree
My parents want me to go to college for the good of our family.	C	C	C	C
My parents are willing to help me fill out college applications.	C	C	C	C
I can count on my parents for college-related support.	C	C	C	C
My parents want me to go to college because they did not have the opportunity to do so.	C	C	C	C
My parents are willing to edit my college application essays.	C	C	C	C
My parents feel that you have to go to college to be successful in this country.	C	C	C	C
My parents are willing to help me prepare for college interviews.	C	C	C	C
Even though my parents don't talk about college, I know they want me to go.	C	C	C	C
My parents are willing to help me fill out financial aid forms.	C	C	C	C
My parents want me to go to college so that I can make more money and/or have a better job when I graduate.	C	C	C	C
My parents are willing to arrange campus visits.	C	C	C	C
My parents think it is important to go to college.	C	C	C	C
My parents want me to go to college to have a better life.	C	C	C	C
My parents don't want me to have a job in high school so that I can have more time to focus on school.	C	C	C	C

PERCEIVED SUPPORT AND ASPIRATIONS SURVEY

General Questions

15. Gender

- ☐ Male
- ☐ Female

16. Please select one or more of the following choices to best describe your race.

- ☐ Hispanic/Latino/Latina
- ☐ Black/African American
- ☐ White
- ☐ Asian
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ American Indian or Alaska Native
- ☐ Other (please specify)

17. If you are Hispanic or Latino/Latina, which of the following are you?

- ☐ Mexican, Mexican American, Chicano
- ☐ Cuban
- ☐ Dominican
- ☐ Puerto Rican
- ☐ Central American (Guatemalan, Salvadoran, Nicaraguan, Costa Rican, Panamanian, Honduran)
- ☐ South American (Columbian, Argentinean, Peruvian, etc.)
- ☐ Does not apply

18. Was your mother (or female guardian) born in the United States?

- ○ I don't know
- ○ Yes
- ○ No, she was born in:

PERCEIVED SUPPORT AND ASPIRATIONS SURVEY

19. Was your father (or male guardian) born in the United States?

- ○ I don't know
- ○ Yes
- ○ No, he was born in:

20. How far in school did your mother (or female guardian) go? Indicate your mother's highest level of education.

- ○ Did not finish high school
- ○ Graduated from high school or equivalent (GED)
- ○ Graduated from high school and attended a 1- or 2-year school (such as a vocational or technical school, a junior college, or a community college), but did not complete a degree
- ○ Graduated from a 1- or 2-year school (such as a vocational or technical school, junior college, or a community college)
- ○ Graduated from high school and went to college, but did not complete a 4- or 5-year degree
- ○ Graduated from college (4- or 5-year degree)
- ○ Completed a master's degree or equivalent
- ○ Completed a Ph.D., M.D., or other advanced professional degree
- ○ Don't Know
- ○ Does Not Apply

21. How far in school did your father (or male guardian) go? Indicate your father's highest level of education.

- ○ Did not finish high school
- ○ Graduated from high school or equivalent (GED)
- ○ Graduated from high school and attended a 1- or 2-year school (such as a vocational or technical school, a junior college, or a community college), but did not complete a degree
- ○ Graduated from a 1- or 2-year school (such as a vocational or technical school, junior college, or a community college)
- ○ Graduated from high school and went to college, but did not complete a 4- or 5-year degree
- ○ Graduated from college (4- or 5-year degree)
- ○ Completed a master's degree or equivalent
- ○ Completed a Ph.D., M.D., or other advanced professional degree
- ○ Don't Know
- ○ Does Not Apply

PERCEIVED SUPPORT AND ASPIRATIONS SURVEY

22. How many OLDER brothers or sisters do you have?

23. How many of your brothers/sisters have gone to college?

PERCEIVED SUPPORT AND ASPIRATIONS SURVEY

Hopes and Dreams Question

24. In an ideal world, how far in school would you want to go?

- ○ Less than high school graduation
- ○ GED or other equivalency only
- ○ High school graduation only
- ○ Attend or complete a 1- or 2-year program in a community college or vocational school
- ○ Attend college, but not complete a 4- or 5-year degree
- ○ Graduate from college (4- or 5-year degree)
- ○ Obtain a master's degree or equivalent
- ○ Obtain a Ph.D., M.D., or other advanced degree
- ○ Don't know

Appendix D
Survey: Senior Info Form 2010

Survey: Senior Info Form 2010

Please Note: You must save your application within 4 hours to keep information that was entered. You do not need to complete your entire application in 4 hours however.

Thank you for taking the time to complete the Puente Senior Survey. The information you provide helps the Puente Project learn how students in the program might increase its effectiveness.

* 1. What high school do you attend?

SELECT ONE

II. Student Information

* 2. First Name

3. Middle Initial

* 4. Last Name

* 5. Last 4 digits of your Social Security # (If you do not have a SSN, Please enter 0000)

* 6. High School ID #

* 7. Address Line 1

8. Address Line 2

* 9. City

* 10. State/Province/Region

* 11. Zip/Postal Code

* 13. Country of Birth?

United States

* 14. Gender

- Female
- Male

* 15. Ethnicity

SELECT ONE

* 16. Home Phone Number

* 17. Date of Birth [MM/DD/YYYY]

III. Name and address of someone who will always know how to contact you.

* 18. Contact Name

* 19. Relationship To You

* 20. Address

* 21. City

* 22. State

* 23. Zip Code

* 24. Phone

25. Email Address (If available)

IV. Survey Questions

* 26. I have participated in the following (select all that apply):
  - ☐ AVID
  - ☐ MESA
  - ☐ EAOP
  - ☐ COSMOS
  - ☐ GEAR UP
  - ☐ Project GRAD
  - ☐ Other (specify)

* 28. I feel that my participation in the Puente Project has increased my knowledge about college. Choose one:
  - ☐ Strongly Agree
  - ☐ Somewhat Agree
  - ☐ Neither Agree nor Disagree
  - ☐ Somewhat Disagree
  - ☐ Strongly Disagree

* 29. What aspect of your Puente Program experience stands out for you as being particularly supportive of your educational goals? (Check all that apply):
  - ☐ Puente Counselor
  - ☐ Puente Teacher
  - ☐ Exposure to Latino literature and culture
  - ☐ Puente peers/Puente familia
  - ☐ College/cultural visits and field trips
  - ☐ Community Leadership component Other

* 31. What is the highest level of education you hope to achieve? (Check one):
  - ☐ High School Graduate
  - ☐ Some College
  - ☐ Community College
  - ☐ 4-year college or university (BA/BS degree)
  - ☐ Graduate/Professional School (MA/MS/PhD)
  - ☐ Military
  - ☐ I don't know
  - ☐ Other

* 32. Are you eligible for FREE or REDUCED Lunch?
  - Yes
  - No
  - Not sure

* 33. **Do you have OLDER brothers/sisters?**
  - Yes
  - No

* 35. Indicate your mother's (or female guardian's) highest level of education:
  - Did not finish high school
  - Graduated from high school or equivalent (GED)
  - Attended a junior college, or community college, or a vocational or technical school, but did NOT complete a degree
  - Graduated from a junior college, or community college, or a vocational or technical school, but DID NOT complete a degree
  - Attended a 4-year college/university but did NOT complete a degree
  - Graduated from a 4-year college/university
  - Completed a master's degree or equivalent
  - Completed a Ph.D., M.D., or other advanced professional degree
  - Don't Know
  - Does Not Apply

* 36. Indicate your father's (or male guardian's) highest level of education:
  - Did not finish high school
  - Graduated from high school or equivalent (GED)
  - Attended a junior college, or community college, or a vocational or technical school, but did NOT complete a degree
  - Graduated from a junior college, or community college, or a vocational or technical school, but DID NOT complete a degree
  - Attended a 4-year college/university but did NOT complete a degree
  - Graduated from a 4-year college/university
  - Graduated from a 4-year college/university
  - Completed a master's degree or equivalent
  - Completed a Ph.D., M.D., or other advanced professional degree
  - Don't Know
  - Does Not Apply

In the first semester or term of this school year, how often have you discussed the following with either or both of your parents or guardians? (Chose one for each line)

	Often	Sometimes	Rarely	Never
* 38. Selecting courses or programs at school	○	○	○	○
* 39. School activities or events of particular interest to you	○	○	○	○
* 40. Things you've studied in class	○	○	○	○
* 41. Your grades	○	○	○	○
* 42. Jobs you would like to have after completing school	○	○	○	○
* 43. Specific jobs you might apply for after high school	○	○	○	○
* 44. Plans and preparation for ACT or SAT tests	○	○	○	○
* 45. Going to college	○	○	○	○
* 46. Community, national, and world events	○	○	○	○
* 47. Things that are troubling you	○	○	○	○

Please answer the following statements about your parents (Chose one for each line)

	Often	Sometimes	Rarely	Never
* 49. My parents encourage me to have educational goals beyond high school	○	○	○	○
* 50. My parents contacted my school counselor and/or teachers to get advice about college for me	○	○	○	○
* 51. My parents tell me that I should study and work hard so that I can get into college	○	○	○	○
* 52. My parents and I talked about which high school courses I should take to get in to college	○	○	○	○
* 53. My parents told me that I should take AP exams	○	○	○	○
* 54. My parents told me that I should take SAT and/or ACT tests	○	○	○	○
* 55. My parents encouraged me to take advantage of the help I receive from the Puente Program	○	○	○	○

*56. PSAT Taken?
- ○ Yes
- ○ No

*57. ACT Taken?
- ○ Yes
- ○ No

*60. SAT Taken?
- ○ Yes
- ○ No

* 62. Advanced Placement (AP) Tests Taken?
- ○ Yes
- ○ No

* 64. Did you take the CSU English Placement Test (EPT) and Entry Level Math (ELM) placement exam during your STAR testing in the 11th grade?
- ○ Yes
- ○ No
- ○ I never heard of these tests

Please provide the following 4-year college information:

* 65. Have you applied to a 4-year college?
- ○ Yes
- ○ No

	University of California								
	UC Berkeley	UC Davis	UC Irvine	UC Los Angeles	UC Merced	UC Riverside	UC San Diego	UC Santa Barbara	UC Santa Cruz
67. To which schools have you applied?	☐	☐	☐	☐	☐	☐	☐	☐	☐
68. To which schools have you been accepted?	☐	☐	☐	☐	☐	☐	☐	☐	☐

	CSU Bakersfield	CSU Channel Islands	CSU Chico	CSU Dominguez Hills	CSU East Bay	CSU Fresno	CSU Fullerton	Humboldt State University	CSU Long Beach	CSU Los Angeles	California Maritime Academy	CSU Monterrey Bay	CSU Northridge	California Polytechnic State University Pomona	CSU Sacramento	CSU San Bernadino
70. To which schools have you applied?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
71. To which schools have you been accepted?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

72. Other 4-year college/university you applied to (Private/Out of State) - list, and separate with commas

73. Other 4-year college/university you were accepted to (Private/Out of State) - list, and separate with commas

* 74. Select the college/university that you plan to attend after graduation
- University of California
- California State University
- Community College
- Private College
- Other

What factors were important to you as you considered which college you will attend? (MARK ONE RESPONSE ON EACH LINE)

	Not Important	Somewhat Important	Very Important
* 83. Low expenses (tuition, books, room and board)			
* 84. Availability of financial aid, such as a school loan, scholarship or grant			
* 85. Availability of specific courses or curriculum			
* 86. Strong reputation of the school's athletic program			
* 87. Active social life at the school			
* 88. Ability to attend school while living at home			
* 89. Chance to live away from home			
* 90. A low-crime environment			
* 91. A good record for placing graduates in jobs			
* 92. A good record for placing graduates in graduate school			
* 93. A strong reputation of the school's academic programs			
* 94. Easy admission standards			
* 95. Availability of a degree program that will allow you to get a job in your chosen field			
* 96. Racial or ethnic composition of the school			
* 97. Size of the school			
* 98. Geographic location of the school			
* 99. Ability to attend the same school your parents attended			
* 100. Being able to apply college credits earned while you were in high school			

101. Will you be moving away from home to live on campus or close to campus?
- Yes
- No

102. Are your parents supportive of your college choice?
- Yes
- No

103. Do you need more information about your financial aid package?
- Yes
- No

104. Are you planning to work while attending college?
- Yes
- No

105. If you could have additional support as you transition from high school to college, which workshops below would you choose?
- Time management
- Balancing work and school Paying for college
- Note taking
- Education abroad
- Managing homesickness
- Managing family responsibilities while attending college
- Life skills
- Money management
- Living away from home
- Making healthy choices
- Student life
- Student safety
- Study skills

Footnotes

1. College refers to any type of postsecondary institution unless otherwise specified.
2. The term Latino/a(s) is used to refer to any individual(s) who trace their origin or ancestry to the Spanish-speaking locales of Latin America and/or the Caribbean.