

MORE THAN MONEY: HIGHER EDUCATION DECISIONS
OF LOW-INCOME AND MINORITY STUDENTS

by

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DEDICATION

I dedicate this research first to God, for calling and empowering me to change lives through education. Husband, thank you for “showing me the deer,” and for your undying love, encouragement, support, and sacrifices. You are truly selfless, and I could not have earned this degree without you and our son championing me. My dreams could have never taken flight without your prayers lifting them, or without your commitment to our family. Even the defense was on our wedding anniversary. Thanks for being my best friend: F&B ☺ Son, thank you for showing patience when I could not take you to the park or McDonald’s. I am grateful to be a mommy again, and to enjoy this wonderful life with you, my doctorate child. I hope our efforts will make your life smoother than ours were. I hope you do earn your 136 Ph.D.s. My two boys (husband and son), we earned this degree together. 3054 Family, you always believed that I would reach my goals – great and small. Thanks for your help, love, strength, prayers, foundation, wisdom, and wonderful memories. You breathed life into my being. Sis, thanks for the babysitting while I finished my paper.

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ABSTRACT

MORE THAN MONEY: HIGHER EDUCATION DECISIONS OF LOW-INCOME AND MINORITY STUDENTS

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A gap persists in K-12 academic achievement, high school persistence, college attendance, and educational attainment by income level and race/ethnicity. Issues of race and ethnicity in education are often intertwined with those of economic status because African Americans and Latinos are more likely to live in poverty and have lower median household incomes than are Whites in US. Much of the literature regarding the achievement gap focuses on barriers faced by low-income and minority students; two barriers in particular are low student motivation and inadequate academic preparation. In addition to these individual level barriers, schools as institutions perpetuate and reward the possession of cultural capital, which low-income minority students often lack, thereby alienating low-income minority students from the learning process.

To explore the college attendance decisions of low-income minority students, a case study was conducted of a not-for-profit organization committed to improving college readiness and increasing college access for underserved populations. The current study focused on the college attendance decisions, including the decision of whether to attend college, made by low-income African American and Latino students when they had successfully completed high school, and were guaranteed scholarships to pay for college tuition. The current study analyzed the factors that influenced their higher education decisions, including the perceived barriers that limited their higher education choices and college access.

The literature consistently asserts that a lack of money threatens the academic pursuits of low-income minority students. Levine and Levine (1995), for example, found that insufficient funding for tuition, a shift in federal aid from grants to loans, rising tuition costs, and higher college entrance standards were barriers to educational attainment for low-income minority students. However, the current study found that decisions regarding college attendance were shaped as much by other variables (e.g. student motivation; academic preparation; achievement ideology, levels of capital), in addition to tuition expenses and funding sources.

The findings of this study suggest that although money is important, it is not sufficient to remedy inequities in college access. It is not just a lack of money that negatively affects college attendance for low-income minority students. Findings indicate that social and cultural preparation for college were more important than financial preparation in predicting college attendance for low-income minority students.

Respondents who felt academically, socially, and culturally prepared to attend and graduate college were more likely to attend college, and to attend four-year colleges and universities, compared to those who did not feel prepared. Because of the pervasive poverty and denied access to quality academic and other resources, social and cultural preparation were found to be more important than money in promoting college access for low-income minority students. More than money is necessary to parity college access for low-income minority students.

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CHAPTER I

THE PROBLEM

Statement of the Problem

Low-income and minority students attend college at rates disproportionately lower than do their wealthier and White counterparts, and lower than their representation in the U.S. population would suggest. The reasons why this is the case remain to be explored.

Background of the Problem

American colleges and universities were opened in the 1640s for the purpose of educating upper class White men to serve in positions of power in the new world (Thelin, 1996). In the late 1770s, women won the right to attend college, and in 1772, Salem College was opened in North Carolina as the first American women's college. It would be nearly another century until Blacks in the US would even be recognized as citizens, much less be allowed admission into such an exclusive institution as the university. In 1837, Cheney University in Pennsylvania became the first Black college. In the 1890s, shortly after the end of slavery, Black land-grant colleges (HBCUs) were created through federal grants for educating the newly freed Blacks. These colleges and universities served many Blacks and non-Blacks over the years, but little by little, minority students were allowed access to predominantly white universities as well.

Indeed, by the mid 1990s, historically Black colleges and universities (HBCU) enrolled only 16 percent of African American college students (NCES, 1996). The majority of today's African American students attend predominantly white institutions (PWIs).

In the mid-1960s, Title V of the Higher Education Act began providing federal grants to support education at Hispanic Serving Institutions (HSIs), that is, institutions with at least 25 percent Hispanic/Latino enrollment (HACU, n.d.). HSIs that are provided Title V funds may use the funds to enhance the education offered, in ways such as improving technology and infrastructure, increasing academic offerings, strengthening academic rigor, managing outreach to K-12 schools to foster a college going culture, and expanding internet connectivity for communication and distance learning. Approximately 50 percent of today's Latino undergraduate students attend HSIs, although many do so without the deliberate intent to enroll at an HSI, and often without the knowledge that their chosen institution is classified as such (HACU, n.d.). Latino students, when considering location, cost, and accessibility, gravitate toward low cost colleges that are close to home, producing a concentration of Latino students at particular colleges (Excelencia in Education, 2007). Because HSIs are named as such de facto, the student demographic profiles on many campuses have resulted in the subsequent labeling of colleges as HSIs, by definition. Despite integration of PWIs, and the development and support of HBCUs and HSIs, African Americans and Latinos are still underrepresented (by population) in higher education.

Socioeconomic and racial/ethnic disparities persist in U.S. educational attainment, even when students are academically prepared to enter college. Low-

income and minority students continue to be less likely than their more affluent and White peers are to attend college. For example, low-income students with the highest standardized test scores (top quartile) attend college at the same rate as high-income students with the lowest scores (bottom quartile) (U.S. Department of Education, 2006). Not only does educational attainment vary by economic status, it varies also by race. Today, Whites are earning college degrees at nearly twice the rate of African Americans, and three times the rate of Latinos, when controlling for income.

Before earning a college degree, however, students must first attend college; college attendance is predicated on academic achievement in grades K-12. African American and Latino high school students underperform compared to their White counterparts on standardized tests (Cantrell, 1999). The mean SAT scores of African American and Latino high school students are lower than the mean scores of White students, which diminish minority students' competitiveness for college admission. According to the SAT report of college-bound seniors graduating high school in 2008, African American students earned the lowest average 2008 SAT scores of all minority subgroups, with an average critical reading-math-writing combined score of 1280 out of a possible 2400 (The College Board, 2008). Mexican Americans (the majority of the Latino population in the city to be studied) scored 1364 (The College Board, 2008). In contrast, White students scored an average of 1583 (The College Board, 2008). According to NCES (2003), among students who graduated college, 4.8 percent of African Americans, 11.3 percent of Hispanics, and 19.2 percent of Whites scored in the top quartile of ACT/SAT exams. Conversely, the percentages of each population that

scored in the bottom quartile were 44.2, 26.1, and 16.9, respectively. Among all U.S. public high school students, 40 percent of White, 23 percent of African American, and 20 percent of Latino students graduate from high school and meet average general admission requirements to a four-year college (Alliance for Excellent Education, 2008).

U. S. high school graduation rates are low, averaging 68 percent. Lower still are the rates at which Latino and African American students are graduating from high school. In 2001, 53 percent and 50 percent respectively, of Latino and African American students who entered ninth grade graduated with a high school diploma within four years (graduating on time) (Orfield, Losen, Wald, & Swanson, 2004). White students graduated high school at a rate of 75 percent. According to Orfield et al. (2004), districts with high poverty, located in central cities, that have high percentages of students with disabilities, or with high percentages of English-language-learners are more likely to have low graduation rates (p. 5). The school district represented in the current study is a district with all of these characteristics, so we can expect ethnic and socioeconomic disparities, with high school graduation rates that are lower than the national averages reported in Table 1.

Table 1. Graduation Rates by District Type (Orfield et al., 2004, p. 5)

District type	Cumulative promotion index graduation rate
Racial composition	
Majority White	74.1%
Majority minority	56.4%
Limited English proficiency (LEP) participation	
Low (<9percent)	70.3%
High (>9percent)	60.1%

Table 1 (continued)

Free/reduced lunch	
Low (<38percent)	76.0%
High (>38percent)	57.6%
Special education	
Low (<13percent)	69.7%
High (>13percent)	65.0%
Location	
Central city	57.5%
Suburb	72.7%
Town	69.1%
Rural	71.9%

Educational goals have been found to vary by socioeconomic status. According to the U.S. Department of Education (2005), which calculates SES based on a combination of income, parent's education, and parent's occupation, 22 percent of low SES students, compared to 31 percent of middle SES, and 53 percent of high SES students expect to earn at least a bachelor's degree. This most probably means that although minority students have higher educational ideologies than do White students, along the way they adjust their goals to meet reality (Mickelson, 1990). Therefore, although minority students may have a high desire to achieve, they are not as likely to turn those dreams into reality.

Some researchers suggest that minorities, particularly African American students, have higher educational goals than do their White peers, when holding household income constant (Mickelson, 1990; Portes & Wilson, 1976; Jencks 1972). These goals reflect the ideologies or educational desires of students. However, although their goals are higher, they reach their goals at a much lower rate than do their White classmates, as the data presented in this chapter has shown. Some reasons for African

American and Latino students' relatively low rates of educational attainment will be presented in Chapter 2.

Regardless of their educational goals, African Americans and Latinos are less likely than are Whites to attend college. To illustrate, 49 percent of African Americans ages 25-29 attended at least some college; 19 percent of African American adults have a bachelor's degree or higher (U.S. Census Bureau, 2007). Thirty-four percent of Latinos aged 25-29 have attended at least some college; 12 percent of Latino adults have a bachelor's degree or higher (U.S. Census Bureau, 2007). In comparison, 58 percent of Whites ages 25-29 have attended some college; 30 percent of White adults have a bachelor's degree or higher (U.S. Census Bureau, 2007).

African Americans and Latinos are less likely than Whites are to hold a baccalaureate degree. Although Latino and African American adults account for 13 percent and 12 percent, respectively, of the U.S. adult population, they represent only 5.6 percent and 7.5 percent, of all adults who have earned at least a baccalaureate degree. In contrast, White adults account for 83.6 percent of bachelor's degree holders. If there were educational equality, educational attainment for these minority students would reflect the larger population's demographics. College graduation rates for all populations are low, especially for Latino and African American college students. Within five years of entering college, 18 percent of Latino and 17 percent of African American students earned a bachelor's degree, compared to 27 percent of White students (U.S. Department of Education, 2004).

Educational attainment is disparate by socioeconomic status also. Low-income students, with annual household incomes under \$36,000, are less likely than high-income students (annual household incomes over \$94,000) are to attend college and earn a college degree. Within eight and a half years, only 36 percent of low-income students compared to 81 percent of high-income students who graduate from high school complete college (U.S. Department of Education, 2006). This disparity may be partially attributable to lower-income students' lack of access to information about how to enroll in college and the culture of college (U.S. Department of Education, 2006; UNC, 2007; NCAN, 2009).

Table 2. College Attendance Rates. Source: National College Access Network (2009)

Average standardized test scores by quartiles	SES	
	<u>Low</u>	<u>High</u>
High	78%	97%
Low	36%	77%

Benefits of Obtaining a Higher Education

Obtaining a higher education is becoming increasingly important for participation in the labor force (Bureau of Labor Statistics, 2008). The percentage distribution of jobs in America that are available with a high school diploma is decreasing, as the percentage distribution of jobs that require at least some college is increasing. By 2016, jobs that require at least some college are projected to account for 57percent of available jobs (BLS, 2008). These data indicate an increasing likelihood that jobs in US will demand that employees have a higher education.

A strong correlation between education and earnings also confirms the importance of a college degree. Adult workers (aged 18 and over) who completed only high school earned approximately 13.5 percent lower wages than did workers whose highest education was some college (U.S. Census Bureau, 2001). Likewise, adults who reported only some college education earned approximately 38 percent less than did those who earned a bachelor's degree or higher. In 2001, the average annual salary of bachelor's degree holders was \$46,000, compared to \$27,000 for those who completed only high school (U.S. Census Bureau, 2001).

Income disparities are exacerbated by race/ethnicity. According to the U.S. Department of Education (2006), within the same education level (highest level attained), income differs by race and ethnicity. In 2006, the median annual full-time earnings for the total population of bachelor's degree holders were \$43,700. Median earnings for White, Latino, and African American bachelor's degree holders were \$44,700, \$40,600, and \$38,600 respectively (U.S. Dept. of Education, 2006). This fact emphasizes how critical earning a higher education is for minority students, to ameliorate inequalities.

Educational attainment correlates strongly and inversely with poverty. Among bachelor's degree holders, the poverty rate is 4 percent, compared to 12 percent for those who completed only high school; the latter group is three times more likely to live in poverty than are college graduates (U.S. Census Bureau, 2008). Therefore, earning a college degree can increase earnings and decrease the likelihood of living in poverty.

Recent challenges to affirmative action have made it increasingly important for universities to recruit qualified, diverse student applicants. Without doing so, Latino and African American students may have reduced access to higher education. As 2008 SAT scores reflected, increased reliance on college entrance exams, without consideration for diversity, might result in denial of access to higher education for African American and Latino students (Cantrell, 1999; The College Board, 2008).

Campus diversity is another benefit of promoting college access for low-income minority students. Diversity is not only necessary for educational and economic empowerment, but also essential to strengthen society in general. Many educational organizations, including National Association of Student Personnel Administrators, American Association for Higher Education, College and University Personnel Association, Golden Key International Honour Society, ACT, and The College Board, endorse the American Council on Education's (1999) message on diversity in higher education. The following is an excerpt from that statement.

Diversity enriches the educational experience . . .

It promotes personal growth—and a healthy society.

Diversity challenges stereotyped preconceptions; it encourages critical thinking; and it helps students learn to communicate effectively with people of varied backgrounds.

It strengthens communities and the workplace.

Education within a diverse setting prepares students to become good citizens in an increasingly complex, pluralistic society.

It enhances America's economic competitiveness.

Sustaining the nation's prosperity in the 21st century will require us to make effective use of the talents and abilities of all our citizens, in work settings that bring together individuals from diverse backgrounds and cultures (American Council on Education, 1999).

Equity is perhaps the most important reason for promoting college access for low-income students. College and university student enrollments should be more reflective of the U.S. population (Magner, 1991). Without equity, persisting education gaps could continue to exacerbate economic disparities among U.S. citizens, resulting in citizens' unequal abilities to participate in democracy. Education equity is vital not just for today's students, but also because the benefits of education extend to future generations. If some U.S. populations are precluded from participating in higher education, they could be relegated to substandard lives for themselves, their families, and communities. Levin (1994) wrote,

In all human populations there will be some variance in talents and attainments, even when all members are provided with exceptional opportunities to develop their talents. What that variance will be is certainly open to debate. More questionable, though, are the differences in educational attainments among populations born into different social, economic, and racial circumstances due to inadequate opportunities for human

development. A reasonable criterion is that we have obtained educational equity when representatives of different racial, gender, and socioeconomic origins have about the same probabilities of reaching different educational outcomes (Dowd, 2003, p. 93).

Purpose of the Study

The purpose of this study was to explore the college attendance decisions of low-income minority students, including the decision to attend college. This study explores the important factors in the college decision, and the barriers to college access that low-income Latino and African American students face. Educators and counselors could benefit from understanding why some students do not pursue college, and why others choose to attend the colleges they do. Furthermore, studying students' higher education decisions may help educators diminish college access barriers over which they can have some control. Increasing college attendance and graduation rates of low-income, minority students will promote equity in education.

Chapter 2 will present a detailed discussion of the literature regarding the gap in college attendance and educational attainment, barriers to college access, and factors that promote college attendance. Chapter 3 will describe the research methods and procedures utilized, and provide background information about the case study institution and research participants. Chapter 4 will present a summary of the research findings. Finally, Chapter 5 will discuss the findings, implications, and recommendations for future research.

CHAPTER II

THE REVIEW OF LITERATURE

This chapter examines the literature regarding educational attainment for low-income and minority students, the barriers that threaten that attainment, and the resources necessary to mitigate those barriers. This research focuses on African American and Latino students in the P-16 continuum, particularly emphasizing students' experiences in grades K-12. The chapter is divided into the following sections: (a) background on the achievement gap, (b) barriers to minority educational attainment, (c) achievement ideology, (d) the role of capital, (e) social integration and cultural relevance, and (f) research questions.

Achievement Gap

There is a gap in academic achievement, persistence, college attendance, and educational attainment by income level and race/ethnicity. African Americans and Latinos are more likely to live in poverty than are Whites, and they have lower median household incomes than do Whites. For example, the median household income for African Americans is equal to 60 percent of that for Whites, and African Americans' median wealth is equal to 10 percent of Whites' median wealth. Even among bachelor's degree holders, the median annual earnings of African Americans and Latinos are equal to only 86 percent and 91 percent, respectively, of Whites' median annual earnings (U.S. Department of Education, 2006). Therefore, disparities in income

account for some of the disparities in educational attainment (JBHE, 1999). However, the achievement gap is not attributable to income only. Even within the same income groups, racial/ethnic disparity exists between the educational attainment of Whites and of Latinos and African Americans (JBHE, 1999).

Low-income and minority students drop out of high school at higher rates than do middle- and high-income students and White students. Furthermore, low-income and minority students enroll in college at lower rates than do their counterparts, and they are less likely than are middle- and high-income, and White students to graduate from college. The literature on the achievement gap is presented in order of the continuum from academic achievement, to high school persistence, through college attendance, and finally educational attainment.

Gaps in educational attainment are often predicated on racial/ethnic gaps in academic achievement measured by the two most commonly administered college entrance exams: SAT and ACT; these gaps continue to grow each year. Average combined SAT scores were compared by race/ethnicity in Chapter 1 of this study. The composite scores for the ACT were similar to the SAT. Composite ACT scores were 22.1, 18.7, and 16.9 out of a maximum 36 points, respectively for Whites, Latinos, and African Americans (ACT, 2009).

Although the mean combined SAT scores (critical reading-math-writing) have increased for Latinos, African Americans, and Whites over the last 11 years, the increases for Latinos and African Americans were smaller than for Whites, according to aggregated SAT data. (Figure 1 shows scores over time for three racial/ethnic groups).

In 1999, 40 times more Whites than African Americans earned top SAT scores (700 and higher on either math or verbal section of the 1999 SAT) (JBHE, 1999). In fact, although African Americans were 10 percent of all test takers, they were only 0.7 percent of SAT test takers who scored 700 or greater in either math or verbal (JBHE, 1999). Standardized test scores and academic preparation are both discussed in the barriers section of this chapter.

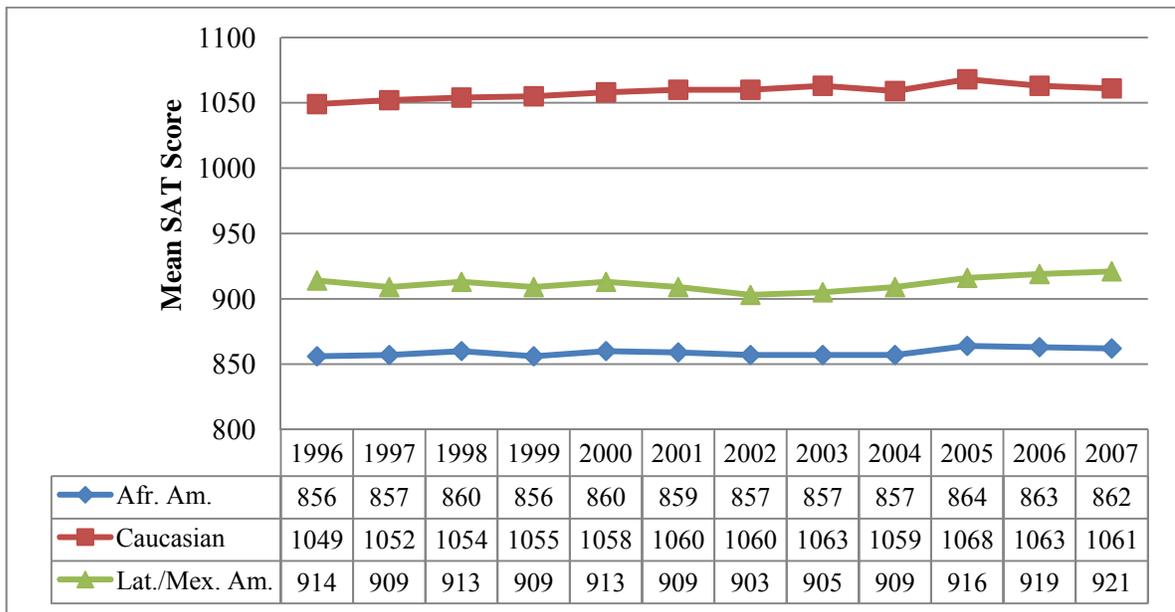


Figure 1. Mean SAT Scores by Race/Ethnicity: 1996-2007
Data source: The College Board (multiple years)

Schools use two typical measures for dropout rates. The status dropout rate measures students aged 16-24 who are not enrolled in high school, and have not earned a GED or high school diploma. Event dropout rate refers to high school students who were enrolled in October, but were no longer enrolled the following year (and had not graduated or earned a GED) (U.S. Department of Education, 2004). Latino students

have the highest status dropout rates compared to African American and White students (U.S. Department of Education, 2008). In 2006, the status dropout rate for Latino students was 22%, compared to 11% for African Americans and 6% for Whites (U.S. Department of Education, 2008). Latino immigrants account for much of the high Latino status dropout rate. Latino immigrants represent 28% of the Latino status dropout, yet they only account for 7% of the 16-24 year old Latino population.

The U.S. Department of Education calculates event dropout rates by household income, divided into three income levels. Low-income is the bottom 20 percent of income distribution; middle-income is the middle 60 percent, and high-income is the top 20 percent. Low-income students were much more likely to drop out of high school (10.4%) than were middle-income (4.6%) and high-income (2.5%) students (U.S. Department of Education, 2004). Event dropout rates were four times higher for low-income students than for high-income students. A comparison of event dropout rates by race in the same year found that Latinos had the highest event dropout rate (8.9%), compared to African Americans (5.7%) and Whites (3.7%) (U. S. Department of Education, 2004).

Among students who graduate from high school, there remain significant ethnic and economic gaps in college attendance. The highest achieving (top quartile on standardized tests) low-income students are attending college at the same rate as the lowest achieving (bottom quartile on standardized tests) high-income students (NCAN, 2009; U.S. Department of Education, 2006). In addition, within eight and a half years, only 36 percent of low-income students compared to 81 percent of high-income

students who graduate high school complete college (U.S. Department of Education, 2006). Racial/ethnic disparities also persist in the rate of students (aged 16-24) who attend college immediately after graduating from high school. Entering college directly from high school is important because students who begin college at age 17 or 18 are more likely to graduate from college within five years compared to students who enter later (National Science Foundation, 2002). In 2006, 58 percent of Latinos and 55 percent of African Americans compared to 69 percent of Whites enrolled in college during the fall semester after spring graduation (U.S. Department of Education, 2001).

This direct-from-high school college attendance rate is significantly related to parents' highest education levels (U.S. Department of Education, 2001). In 1999, the direct-from-high school college attendance rate was 36 percent for students of parents without a high school diploma, and 54 percent for students of parents with only a high school diploma, compared to 82 percent for students of parents with a bachelor's degree or higher (U.S. Department of Education, 2001). The higher education data are especially alarming for Latino and African American students. Among all high school graduates, 27 percent of parents do not have any post-secondary education; this subpopulation is most likely to have the lowest income level, and is more likely to be African American or Latino than any other race or ethnicity (U.S. Department of Education, 2001).

Even when Latinos and African Americans do attend college, they are less likely to graduate than are Whites. In 1996, 17 percent of African Americans and 18 percent of Latinos completed a bachelor's degree within five years of enrolling in college. In

the same year, 27 percent of Whites had completed a bachelor's degree within five years (U.S. Department of Education, 2004).

We know that for students to earn a college degree, they must first be admitted to college. Before that, academic preparation in grades K-12 is critical, as are a desire to attain a college education and a belief in one's ability to do so. The next section reviews the literature regarding barriers that limit educational attainment for low-income minorities, followed by a review of factors that promote college attendance, and a presentation of the research questions that guide this study. While low-income minority students lag behind their peers in both college attendance and college graduation rates, college access is the primary focus of this research.

Barriers to College Access

Many barriers limit the educational pursuits and subsequent attainment of low-income and minority students. It is difficult to distinguish fully the barriers attributable to income levels from those attributable to race and ethnicity. Although low-income students have limited financial resources, disparities in educational attainment do not result solely from a lack of money. We must therefore understand the financial barrier and its role in conjunction with other barriers that must be overcome to improve educational attainment for low-income and minority students. Understanding the barriers that influence low-income minority students' higher education decisions will allow educators to alleviate the barriers over which they can have some control. This section presents researcher-identified barriers to educational attainment, categorized by

the primary level at which each barrier hinders educational attainment. The three categories are individual/family, institution, and society.

Individual Level Barriers

Scholars have identified low student motivation and inadequate academic preparation as two barriers that limit educational attainment for minority and low-income students. The two are not unrelated; low motivation can result in inadequate preparation. Diminished motivation to try hard in school results when students do not feel intimately connected to the school environment through classroom and co-curricular activities (Cammorata, 2007; Dumais, 2002; Feagin, Vera, & Imani, 1996). Feeling connected to school and being motivated to achieve therein are directly related. First, this section presents literature regarding diminished motivation of low-income minority students. Then, literature related to inadequate academic preparation of low-income minority students is presented.

Student motivation. There are individual and institutional reasons why students do not connect with school. This section focuses on the individual reasons why some low-income minority students lack the motivation to succeed academically. Institutional barriers are discussed later in this chapter.

Researchers agree that low motivation is a barrier to educational attainment for low-income minority students, but they have found different reasons why that is the case. First, Cammorata (2007) conducted a case study of Latino students who were at risk of failing or dropping out of an Arizona public high school. Because the students were unmotivated and failing, they were sorted into remediation classes designed for

low performing students, which offered little academic challenge. Cammorata (2007) found that students who had lost their motivation to try hard in school were later reengaged through a more challenging and relevant curriculum. Once they became reengaged in the learning process, they were motivated and became academically successful. The students graduated high school and a majority of them attended college.

Low-income minority students who have negative feelings and perceptions about school in grades K-12 generally do not pursue a college education. Even students who pursue college can feel estranged from the college experience (Feagin et al., 1996). Feagin (1996) conducted a case study of African American college goers at predominantly white institutions (PWIs) and found that African American college goers reported feeling frustrated by the college experience at PWIs, where they felt pushed out due to racism and hostile campus climates. When college goers in the study experienced negative campus climates, they spread that message to their peers and family members at home.

In a similar case study, and Radhakrishnan (2003) conducted survey research with over 1400 African American, Asian, Latino, and White college students, and found that minority college goers had more negative feelings about college campus climate than did Whites. However, they found that these feelings were not based primarily on the perceived racial climate or the actual race of the student, but were based primarily on the perceived academic climate (Reid & Radhakrishnan, 2003). Reid and Radhakrishnan (2003) studied correlations between perceived general campus climate

(dependent variable) and racial climate, academics, and student race (independent variables). They found that African American and Latino students' perceptions about the academic climate were more important to their feelings of general campus climate than were their perceptions of the racial climate. The actual race of the student was the least important independent variable. African American and Latino students reportedly had negative perceptions about the academic climate because they felt that their peers and instructors had low perceptions of their academic ability. Therefore, Reid and Radhakrishnan (2003), while finding that African American and Latinos had negative perceptions of general campus climate, attributed the negative perceptions to the academic culture, and not simply to the fact that they were African American and Latino students.

Another related issue that can affect motivation is what Steele (1997) labeled "stereotype threat." Steele (1997) described stereotype threat as the circumstance that affects a student when, in a given situation, a negative stereotype has been formed about the student, and the student fears his or her performance in that situation will prove the negative stereotype. Students who are exposed continually to stereotypes (e.g., African Americans are academically inferior to Whites) can become anxious and can begin to see themselves as academically weak and not of college-bound caliber. The anxiety then limits the students' performance. Because motivation and achievement drive each other, motivation then diminishes and performance suffers further. Unfortunately, the resulting poor academic performance is consistent with the negative stereotypes. Stereotype threat is a barrier to educational attainment for low-income minorities

because it diminishes motivation and subsequent academic preparation for college (discussed in the next section) (Steele, 1997).

As we can see from the literature, students need affirming relationship with schools to maintain the motivation to succeed in school (Reid and Radhakrishnan, 2007; Feagin et al., 1996; Steele, 1997). Through his studies of high school students, Steele (1997) found that students would succeed in a domain, such as a school, to the degree that they identify with the domain. However, Steele (1997) found that too often minority students do not identify with school and therefore lose the motivation to succeed. Because of weak domain identity, educational attainment for minority students can lag behind that of Whites. There are a number of reasons why students do not connect to school, including, as will be discussed later in this chapter, because as institutions, schools perpetuate cultural capital by rewarding its possession. Low-income minority students, however, often lack cultural capital (Dumais, 2002). This and other institutional level barriers to college access are presented later in this chapter.

A connection between student and school (or lack thereof) is not the only factor related to student motivation; one's outlook on life is another factor. Motivation is also promoted through understanding of what it takes to succeed, and being able and willing to do what is necessary for success. According to McDonald and McMillen (2007), those who value the benefits of education over the sacrifices needed to obtain it will make investments in human capital, including obtaining a higher education. African American and other minority children, however, have shorter life expectancies than do White children (McDonald and McMillen, 2007). African American and Latino

students have seen in their environments examples of peers who have died early, and therefore, they do not always see positive futures for themselves. Without the ability to envision a positive future, therefore, these students often do not see the need to invest in human capital; neither do they see examples of others around them making such investments (McDonald and McMillen, 2007). Medical and socioeconomic issues contribute to this low life expectancy. Increased heart attacks and infant mortality are two medical issues that shorten the life expectancy of low-income minorities (Levine et al., 2001).

Some of the socioeconomic issues that challenge students are embedded within neighborhood issues. African American and Latino children are more likely to live in homogeneously poor neighborhoods than are White children (Acevedo-Garcia, Osypuk, McArdle, & Williams, 2008). African American and Latino children are more likely to live in low-income families as well. In fact, 17 percent of African American children compared to 20 percent of Latino children and 1 percent of White children live in both low-income families and predominantly poor neighborhoods. This scenario is called *double jeopardy* (Acevedo-Garcia et al., 2008). As a result, African Americans and Latinos are also more likely to be subjected to societal ills like drugs, crime, and homicide (McDonald and McMillen, 2007; Levine et al., 2001). These children, subsequently, may think that the opportunity costs of pursuing higher education are too great when they cannot envision a long future for themselves. With prolonged exposure to negative elements within their neighborhoods, low-income minority children can begin to develop a perspective of immediacy, devaluing short-term sacrifices for long-

term gain (McDonald and McMillen, 2007). This mentality can manifest as low motivation toward education, the result of which is minority students' disproportionately low participation in higher education.

Academic preparation. As stated previously, students' lack of motivation in school can diminish preparation for college. Not taking the prerequisite college preparatory courses (whether by choice or unavailability of such classes) can also diminish student preparation for college. So too, systematic denial of access to quality schools can result in inadequate preparation, as will be discussed in the next section (Steele, 1997).

Academic preparation for college is predicated on the college readiness courses taken in high school. College readiness, based on students taking appropriate courses to prepare for college-level work, is low nationally. Only 30 percent of U.S. public high school ninth graders graduate from high school and are college ready by twelfth grade (Alliance for Excellent Education, 2008). While this rate is low, it is even lower for minority students. Only 20 percent of Latinos and 23 percent of African Americans, compared to 40 percent of Whites, are college ready upon high school graduation (Alliance for Excellent Education, 2008).

Students who have taken advanced and honors courses in the core subjects of math, literature and composition, science, and social studies are more likely to be prepared for college, and to score higher on college entrance exams than are students who have not taken those courses (JBHE, 1999). Comparing SAT takers by race/ethnicity reveals differences in the number of higher-level high school courses

taken. This variance in courses taken results in disproportionate rates of college readiness by race, as measured by the SAT (JBHE, 1999). For example in math, 25 percent of Whites and 13 percent of African Americans took calculus; 52 percent of Whites and 40 percent of African Americans took trigonometry; 31 percent of Whites and 18 percent of African Americans took honors math. Forty percent of Whites compared to 28 percent of African Americans took honors English. The White and African American rates of taking honors science were 31 and 19 percent, respectively; honors social studies rates were 31 compared to 20 percent. As these patterns reflect, minority students take advanced and honors level courses at lower rates than do their White students. A positive relationship exists between content mastery in core courses considered college preparatory (e.g. trigonometry, calculus, grammar, American literature, and honors level courses), and the likelihood of attending college (NCAN, 2009). Therefore, academic preparation for college is disparate by race/ethnicity (JBHE, 1999).

Academic achievement is shaped not only by student motivation, but also by social class structure (Steele, 1997; Yan, 1999). As discussed previously, Latinos and African Americans are more likely than Whites are to be members of the lower social class in US. Even if low-income minority students had taken the same courses in high school, they would be less likely to take test prep courses that could make their scores more competitive (JBHE, 1999). SAT and ACT test prep workshops are offered by companies such as Princeton Review and Kaplan, and are designed to help students learn how to take the tests, so they can improve their test scores. Minority students,

however, with incomes equal to only a fraction of Whites' incomes, are least able to afford preparation workshops for college entrance exams, averaging \$700 per workshop (JBHE, 1999). Without equal access to these workshops, low-income minority students are disadvantaged, and they underperform on the tests compared to their White counterparts (Cantrell, 1999; Steele, 1999). African Americans and Latinos earn the lowest SAT and ACT scores among students of all races/ethnicities (College Board, 2008; ACT, 2008; Cantrell, 1999; Steele, 1999). Increased reliance on these scores for college admission can therefore result in unequal access to higher education (Cantrell, 1999; Steele, 1997; Levine and Levine, 1995). Along with lower test scores, poor academic preparation also results in increased dropout rates from high school, and limits the higher education choices and college attendance for low-income and minority students (Fuller, 2002; Opp, 2001; Steele, 1997; Feagin et al., 1996; Levine and Levine, 1995). In addition to the individual level barriers discussed previously, schools also play a role in the inadequate preparation of low-income minority students.

Institutional Level Barriers

Schools can create barriers to college access for low-income minority students. Economic status affects K-12 school choice, based on neighborhood location and school cost (Fuller, 2002). For low-income minority students, economic status results in limited access to quality schools (Fuller, 2002). Minority students are disproportionately likely to attend public schools with (a) concentrated poverty (50 percent or more students receiving free or reduced lunch), (b) high concentrations of

minority students, and (c) low graduation rates (Alliance for Excellent Education, 2008; Kahlenberg, 2006; Picus, 2000; Grissmer et al., 1997; Lang, 1992).

Furthermore, low SES school districts typically have (a) lower quality schools with lower test scores (which can be biased measures), (b) lower attendance, (c) inferior amenities (library, recreation facilities, technology), and (d) more transient students than do wealthy school districts (Picus, 2000). For example, 47 percent of central city residences are renter-occupied compared to 37 percent of suburban residences (McDonald and McMillen, 2007). Higher rental and student mobility rates can lead to cyclical knowledge mismatch, resulting in spatial skills mismatch between the residents in the city (Bartik, 2000). Spatial mismatch is a societal level barrier to college access for low-income minority students, and is discussed later in this chapter. This section focuses on public K-12 schools and two barriers they create that hinder college access for low-income minority students, namely (a) inadequate preparation, and (b) persistent gaps in social and cultural capital.

Inadequate preparation. The previous discussion presented literature regarding inadequate preparation as an individual level barrier. This section presents literature regarding how schools, institutionally, inadequately prepare low-income minority students for college. Education researchers, through case studies and ethnographies, have found that low SES school districts do not hire and retain the most qualified teachers, those who test highest on content certification exams (Kahlenberg, 2006; Kozol, 2001). Additionally, teachers in low SES school districts are often less dedicated to their content areas of expertise (teaching one content area only) compared

to teachers in middle class school districts. Moreover, many good teachers are attracted away from low SES school districts to teach in middle class school districts, where they have better amenities, and students with better preparation and fewer disciplinary problems (Kahlenberg, 1996; Kozol, 2001). Carl Boyd wrote, “No one rises to low expectations.” Teachers and administrators in low SES school districts are more likely to have lower expectations of the students they teach compared to teachers and administrators in middle class districts. The former may not expect students to succeed, and therefore may not encourage academic excellence (Kahlenberg, 2006; Fuller, 2002; Meier, Wrinkle, & Polinard, 1999). Consequently, they may not be dedicated to preparing students for college.

The U.S. Department of Health, Education, and Welfare commissioned a comprehensive, federal longitudinal study of race, income, and school opportunity. The findings of the study were presented in a report entitled, *Equality of Educational Opportunity* (Coleman et al., 1966). The study found that low SES school districts generally have low academic achievement, as measured by standardized tests (Coleman et al., 1966; Kahlenberg, 2006). In addition to low standardized test scores, students in low SES school districts have generally low high school graduation rates (Lang, 1992; Grissmer et al., 1997; Alliance for Quality Education, 2008; Kahlenberg, 2006). Moreover, within these schools, the grades assigned by teachers are weak indicators of academic achievement compared to middle class schools (Kahlenberg, 2006). For example, an average grade of A within a low SES school was found to be equivalent to

an average grade of C in the same subject within a middle class school district, when correlating grades with standardized test scores (Kahlenberg, 2006).

At the primary levels, inner-city schools lack sufficient academic resources to prepare minority students to excel in secondary school (Lang, 1992; Fuller, 2002). After struggling many years, those students, unfortunately, are likely to dropout (McDonald & McMillen, 2007). School districts with low property wealth have smaller tax bases than do districts with greater property wealth (Mikesell, 2003). As a result, residents in low-income districts are often assessed a higher tax rate for public education than are residents in property rich districts. Unfortunately, although the tax rates are higher, the schools provide fewer amenities than do more affluent school districts (Mikesell, 2003). Because of the low tax base, low SES school districts often offer substandard “exposure to learning and enrichment experiences . . . outside of school” compared to their private school counterparts (Lang, 1992, p. 516). As a result, these schools lack sufficient amenities to provide rich academic and co-curricular educational opportunities (Picus, 2000). Unfortunately, these are the experiences assessed by college admissions tests such as SAT and ACT (Lang, 1992).

Denied access to quality schools and education in grades K-12 negatively influences test scores of minority and low SES students; subsequently, their scores are not always true indicators of their abilities (Steele, 1997). Because they are insufficiently prepared for these exams, many low-income and minority students underperform on standardized tests and are ultimately ill prepared for higher education (Cantrell, 1999; Steele, 1997). Disproportionately attending low SES school districts

with low achievement renders low-income minority students inadequately prepared for college, which is a barrier to college access for low-income minority students (Fuller, 2002; Kahlenberg, 2006; Mikesell, 2003).

Persistent gaps in social and cultural capital. Institutionally, schools perpetuate gaps in cultural capital by rewarding the possession of dominant cultural capital (Kahlenberg, 2006; Dumais, 2002). However, low-income minority students usually have low levels of such capital due to their low socioeconomic status. As a result, low-income minority students are distanced from the capital system that is rewarded by schools, and subsequently do not build an affinity with school. The lack of affinity with schooling subsequently distances low-income minority students from the learning processes that should take place (Dumais, 2002).

Low SES school districts concentrate poverty in schools. In doing so, they distance low-income students from the values of middle class students. Case studies of income integration in education institutions found that middle class schools exhibited the following advantages over low-income schools: (a) better conduct, (b) more parental involvement (e.g., social capital), (c) less mobility, and (d) stronger goal setting and planning to achieve those goals (Kahlenberg, 2006). By isolating low-income students in low SES schools without exposure to middle class values, schools create barriers to college access for low-income minority students. This isolation relates to both social and cultural capital. Literature regarding the role of capital in educational attainment is presented later in this chapter.

Segregated schools. The preceding sections described the negative effects of segregation in schools. Issues of racial segregation are intertwined with issues of economic segregation in schools. *Brown v. Board of Education* was the landmark court decision that outlawed segregation in public schools, ruling that separate facilities for Blacks and Whites was unconstitutional. Fifty-five years since that ruling, public schools remain separate and unequal today. Over 70 percent of Latino and African American students still attend class in schools with mostly minority student bodies (Alliance for Excellent Education, 2008). Even middle class African American students are likely to attend segregated schools and live in segregated neighborhoods (JBHE, 1999). Because of this segregation, “they are not taught the pathways and modes of thinking that are embedded in White culture and are reflected in standardized tests” (JBHE, 1999, p. 97). Segregation in elementary and secondary schools results in disparate educational experiences by race (Lang, 1992).

In addition to segregation by race, over 60 percent of minority students are segregated by income, attending schools with concentrated poverty (Alliance for Excellent Education, 2008; Grissmer et al., 1997). A concentration of academic failure is pervasive in these schools. Less than 60 percent of minority students will graduate high school on time (Alliance for Excellent Education, 2008). Furthermore, minority students are five times less likely than are White students to graduate high school (Alliance for Excellent Education, 2008).

Societal Level Barriers

Racially and economically segregated environments are institutional level barriers to college access for low-income minority students. This segregation isolates low-income minority students from the capital that aids educational attainment, and inadequately prepares them for college. At a societal level, economic segregation begets racial segregation within cities, removing poor urban minorities from the means of production and the capital to support educational attainment. Economic shifts, investment in suburban amenities, and capital deficits have weakened the education of poor urban minorities. This section reviews the literature related to the broader, societal causes and ramifications of such segregation on college attendance for low-income minority students.

Economic shifts. Minority and low-income students concentrated in central cities suffer from poor educational opportunities (McDonald & McMillen, 2007). William Julius Wilson (1996), a leading sociologist on race relations and urban poverty, has spent decades studying urban economics and demographics. From his studies, he found that a concentration of poor urban minorities is not just a function of where they live; it is also due to significant shifts in employment and economic sectors (Wilson, 1996). These shifts represented (a) scientific shifts toward technology, (b) sociological shifts in required skill sets, (c) industry shifts from labor-intensive to service related jobs, and (d) physical shifts away from the city core to suburban areas. Unemployment of urban Blacks, in particular, resulted from these economic shifts and the declining U.S. economy during the 1970s and 1980s, with labor productivity growing just 0.8

percent per year (Wilson, 1990, p. 44). By analyzing 1960s and 1970s census data, Wilson (1979) found that labor jobs moved to the suburbs as the economy shifted to service and technical jobs (McDonald & McMillen, 2007, p. 415). As a result, the availability of labor employment was declining for poor urban minorities.

Spatial mismatch ensued as the distance between the supply and demand of low skill jobs increased, exacerbating racial and economic segregation (Bartik, 2000). As people migrated to the suburbs, they demanded new schools to support their children. When these newly suburban families required new amenities, such as public schools, money was divested from central city upkeep, and was shifted to suburban new development (Massey & Denton, 1993). The government support of new school development took money away from existing inner-city schools (Gillham, 2002). Ihlanfeldt (1997) conducted empirical studies of Atlanta's economy and demographics from 1980-1990, and found similar shifts in the economy. Jobs in the northern suburbs increased significantly during the same period when the population of Blacks in the southern suburbs rose at a rapid pace. The evidence reflected a changing economic industry with which poor urban minorities, especially young Blacks, were not keeping pace as the economy moved around them (p. 254-255).

Capital deficits. Additionally, when African American middle class residents migrated from the urban core to the suburbs, they left low-income African American residents without role models in the inner city (Wilson, 1990). Lack of mobility for the poor, along with economic policies that allowed middle-class African Americans to move away resulted in a concentration of poor African Americans in the city center.

This segregation has resulted in physical, sociological, and economic isolation of poor urban minorities (Massey & Denton, 1993).

A recent research study of geographic dispersion in major U.S. metropolitan areas analyzed census tract data to study the effects of geographic dispersion and segregation on children's access to health, education, finances, and other resources (Acevedo-Garcia et al., 2008). The study found that African American and Latino students suffer from double jeopardy. "Not only are Black and Hispanic children more likely to live in poor families than other children are, but they also experience neighborhoods with unfavorable socioeconomic environments" (Acevedo-Garcia et al., 2008, p. 327). Summarizing the findings of Acevedo-Garcia et al. (2008), Philanthropist News Digest published the following,

"segregated, disadvantaged neighborhoods limit economic advancement for minorities due to limited job and educational opportunities, as well as a poor return on housing investment; expose minorities to violent crime, environmental hazards, poor municipal services, and a lack of healthy food options; and lead to segregated and poorer quality healthcare settings."

Many epidemiological issues are pervasive within U.S. neighborhoods that disenfranchise low-income minority children (Acevedo-Garcia et al., 2008; McDonald & McMillen, 2007; Bartik, 2000; Massey and Denton, 1993; Wilson, 1990). Subsequently, low-income minority students, particularly African Americans and

Latinos, have great systemic challenges that limit their academic achievement, college access, and educational attainment.

Low-income African American residents in the city core were also left without African American leaders to assist them in decision-making, resource finding, and securing political representation. When much of the social, cultural, and human capital migrated to the suburbs, the resulting culture of poverty was isolated from the mainstream societal culture, values, and political acumen necessary to improve their economic condition (Massey & Denton, 1993; Wilson, 1990). The role that capital plays in college attendance is discussed later in this chapter.

Achievement Ideology

Portes and Wilson (1976) studied the interaction between race and educational attainment, educational aspirations, self-esteem, family structure, crime, and academic achievement. In analyzing the role of U.S. stratification on college access, they found that when holding parental status and mental ability equal, African Americans, followed by Latinos, had the highest educational attainment goals of all races/ethnicities. They achieved those goals at much lower rates than did others, however.

Goldsmith (2004) studied 1998 National Education Longitudinal Study (NELS) survey data of 25,000 eighth graders nationwide to understand the factors that contribute to achievement disparities between African Americans, Latino, and Whites. Goldsmith (2004) found that African American students had the highest achievement ideologies of all students, followed by Latino students. Achievement ideology refers to students' beliefs about their educational aspirations and occupational expectations, in

addition to attitudes toward school (Goldsmith, 2004, p. 121). Goldsmith (2004) made two significant findings when comparing achievement ideology by race. First, African American and Latino students had the highest educational aspirations and occupational expectations. Second, African Americans had the most positive attitudes toward school (especially when they were attending segregated-minority schools with minority teachers).

African Americans and Latinos were found to have higher educational aspirations and lower peer aversion to education compared to Whites, yet they attained higher education at a lower rate than did Whites (Portes & Wilson, 1976; Goldsmith, 2004; Jencks, 1972). If minority students had the highest levels of achievement ideology, why did they reach their educational goals at the lowest rates of all racial/ethnic groups? Some educators have said that minority students' high achievement ideology is irrational due to unrealistic assessments of their potential and mobility processes (Goldsmith, 2004). Portes and Wilson (1976) found that African Americans were classified as outsiders in a path to educational attainment. For outsiders, subjective variables such as determination were more strongly correlated to attainment than objective variables such as academic achievement in grades K-12. While these are two potential explanations, Mickelson's (1990) explanation (I.e. concrete vs. abstract ideas about goal attainment) was applied to this current study because it relates to socioeconomic status and mobility.

In a study involving approximately 1,100 high school seniors in Los Angeles, Mickelson (1990) found that when African American students did not see examples of

academic success in their environments (e.g. families, communities), their behaviors and subsequent outcomes were not likely to be affected by their beliefs. Mickelson (1990) theorized, therefore, that African American students had abstract ideas of achievement, formed through thoughts (versus experience) and intangible ideas (Mickelson, 1990; Kao & Tienda, 1998). They are rooted in the *American dream* belief that a college education can provide social and economic mobility (Mickelson, 1990). Mickelson (1990) found that concrete ideas were better predictors of achievement (such as the connection between academic achievement and educational attainment) than were abstract ideas. Concrete ideas of achievement are formed through experience and are connected and relevant to a student's life. They are based on a student's expected returns from a college education, as evidenced within their families and communities (Mickelson, 1990). Because low SES and minority students did not generally see the same returns on education investment as did their peers, their behaviors were inconsistent with their high achievement ideologies, and goal attainment was hindered (Mickelson, 1990). This is a barrier to college access for low-income minority students. The next section presents literature related to capital development, and its promotion of academic achievement and college access.

The Role of Capital

Capital, in the context of this research, refers to the resources a student possesses and can activate to reach his or her educational goals. Yan (1999) identified three types of capital that families provide, which aid college access and educational attainment: financial capital, social capital, and cultural capital.

Financial Capital

Financial capital is measured by household income and wealth. In this research, financial capital represents the financial resources a student has available to pay for college. Latinos and African Americans have lower levels of financial capital than do Whites because Latinos and African Americans earn lower incomes and are more likely to live in poverty than are Whites. In 2007, average household income for Whites was \$54,940 compared to \$38,679 for Latinos and \$33,916 for African Americans (U.S. Census Bureau, 2008). Moreover, poverty is more pervasive for Latinos (22.5%) and African Americans (24.4%) than for Whites (8.2%) (U.S. Census Bureau, 2004). Because they have relatively low levels of financial capital, low-income students disproportionately cannot or believe they cannot afford college (Tierney, 1999). Financial capital, along with social capital and cultural capital promote academic achievement and college access (Yan, 1999). The following sections describe the roles of social capital and cultural capital in promoting college access and educational attainment for low-income minority students.

Social Capital

Social capital, as treated in educational literature, refers to a student's integration within the school community (Tierney, 1999). This integration is aided by relationships that can help students reach their educational goals (Yan, 1999). Social capital is largely dependent on family variables that determine and indicate the types and amount of interaction within families. Parent education and income are directly related to parental involvement, and they serve as predictors of academic success and

subsequent educational attainment of children (Yan, 1999). Ethnicity, socioeconomic status, and family structure also affect social capital. There are multiple measures of socioeconomic status as a variable in social capital. Portes and Wilson (1976) included parent occupation and education (as measures of parental involvement), as well as the number of books and the number of rooms in a home, to measure socioeconomic status. Similarly, Teachman (1987) included the number of books in the home, in addition to whether a student had a specific place to study, as measures of socioeconomic status, to measure social capital.

Yan (1999) defined four dimensions of social capital: (a) parent-teen interactions, (b) parent-school interactions, (c) parent-parent interactions, and (d) family norms. First, parent-teen interactions refer to communication between parent and teen, centered on topics that are of interest to the teen, particularly education plans. It also includes joint participation in cultural events (Yan, 1999). Second, parent-school interaction refers to a parent's involvement in organized school activities, and a parent's knowledge of their child's in-school experiences and plans. Third, parent-parent interactions are measured by the level of parent engagement and relationships shared with parents of their child's peers, particularly focused on students' educational plans. Finally, family norms are the rules, expectations, and positive relationships with children (Yan, 1999, p. 8). Yan (1999) analyzed NELS data for a representative sample of U.S. eighth grade students, to compare parental involvement between African American and White families. In particular, Yan (1999) studied how social capital

factors differed between successful African American students, successful Caucasian students, and unsuccessful African American students.

Yan's study yielded three important findings. First, African American parents had lower household incomes than did White parents. Second, African American parents had lower levels of education than White parents did. Third, African American parents were more likely than White parents were to raise children in single parent households (Yan, 1999). The latter is important because Yan (1999) found that (a) single parenting indicates family disruption at some point in time, and (b) single parents on average had less opportunity to interact with children than married parents did; consequently, they transmitted lower levels of social capital to their children than did married parents.

The difference in social capital transmitted is most likely due to differences in bonding capital. Bonding capital, in this study, refers to the time spent in parent-teen interactions focused particularly on children's' educational goals. Providing nurturing and spending time with children are important to building bonding capital. Bonding capital is horizontal capital that connects people with others who have similar social status (Putnam, 2000). Bonding capital helps us feel connected to our communities and each other, but does not help us to move from one social class to another (Putnam, 2000).

Furthermore, Yan (1999) concluded that social capital was essential for educational attainment, because it relates directly to enforcing education and setting high academic expectations. Bonding capital is one type of social capital, another

important type of social capital is bridging capital (Putnam, 2000). Bridging capital refers to the relationships, group affiliations, and social networks one can use to connect with others who possess high levels of cultural capital. Setting high academic expectations and connecting students with others who can help them reach their goals is the essence of bridging capital (Putnam, 2000). Low-income minority students have disproportionately low levels of bridging capital, which may be one factor attributable to their disproportionately low rates of college attendance and educational attainment. Bridging capital helps us build vertical relationships. Regardless of marital status, bridging ties can be established that allow parents to learn from others the processes necessary to apply, attend, and finance higher education. Bridging capital promotes the upward mobility of children through higher education (Putnam, 2000).

The good news is that social capital was found to be the easiest of the three family-provided forms of capital (financial, social, and cultural) to strengthen (Yan, 1999). Even with low financial capital, high academics and social capital can be attained by placing high values on education (Duran & Weffer, 1992; Yan, 1999). Setting high expectations for academic achievement can help promote the development of social capital, which in turn can aid college access and educational attainment (Yan, 1999; Duran & Weffer, 1992).

Cultural Capital

Bourdieu (1986) defined cultural capital as the “set of linguistic and cultural competencies individuals usually inherit and sometimes learn” (p. 246). There are three types of cultural capital that one can possess (Bourdieu, 1986). First, embodied capital

refers to the appreciation of things valued by the dominant class. An appreciation of the arts is an example of embodied capital. Embodied capital, as the name implies, is internal and engages one's mind and body. Objectified capital is the second type of cultural capital. Objectified capital refers to the possession, for utility and appreciation, of things valued by the dominant class. Owning a Renoir impressionist painting is an example of objectified capital. As the name implies, objectified capital refers to objects external to the body. Third, institutionalized capital refers to the accumulation of credentials conferred through intuitions valued by the dominant class. A college degree is a form of institutionalized capital, and parents who have earned a college degree are better able to teach their children from experience how to navigate the processes necessary to attend college and obtain conferred credentials. Cultural capital therefore generally measures the alignment of one's values, ideologies, and possessions with those of the elite or dominant class, and the sensibility to appreciate them, as well as one's knowledge and educational credentials (Bourdieu, 1986).

The concept of habitus is central to Bourdieu's (1986) cultural capital framework. Habitus refers to the internal view of one's place in the world, and is driven largely by one's affiliation with a social class and its traditions and expectations of success. This social class orientation is communicated through family. The complete framework involves "one's resources (capital) and the orientation one has toward using those resources (habitus)" (Dumais, 2002, p. 45).

"Academic success is directly dependent upon cultural capital and on the inclination to invest in the academic market" (Bourdieu, 1973, p. 96). This idea

parallels McDonald & McMillen's (2007) finding of low investments in education by low-income minorities in poor neighborhoods, due to low life expectancy. According to Swartz (1997), investing in education depends on a class system and awareness of one's place therein. Lower-class students have low levels of cultural capital, and therefore, make only small investments in the education system. Additionally, lower class students may feel a need for financial security, and therefore not allow themselves to consider abstract college majors, or even the thought of attending college. Instead, students in lower social classes may focus on vocational training or employment to fill an immediate financial need (Swartz, 1997).

Schools perpetuate differences in cultural capital between students of varied social classes (Swartz, 1997). To the extent that students possess the cultural capital of the elite class, their values will align with those that the school is reinforcing and rewarding, resulting in academic success and educational attainment (McDonough, 1997). Students who possess high levels of cultural capital (resources and awareness) tend to do well in school compared to those who do not. Students with high cultural capital have better results in school because they are most comfortable with the values and formal language of academia due to their immersion within the dominant culture, from which they extract knowledge. They also achieve better results because of their increased communication with teachers who are from similar social classes (Dumais, 2002). However, low-income and minority students do not possess sufficient cultural capital (elite values and resources) to identify and therefore engage with the values that elites possess and schools reinforce (McDonough, 1997). Cultural capital theory and its

relevance to educational achievement parallel domain identity theory (Steele, 1997). Low levels of both domain identity and cultural capital can limit college access and educational attainment for low-income minority students.

Social Integration and Cultural Relevance

Social scientists have agreed that low levels of financial, social, and cultural capital reduce the academic achievement and subsequent college access and educational attainment of low-income minority students (Feagin et al., 1996; Tierney, 1999; Cammorata, 2007; Reid & Radhakrishnan, 2003; Williamson, 1999; Bourdieu, 1986; McDonough, 1997; Tinto, 1987; Portes & Wilson, 1976; Dumais, 2002). Research studies in education have consistently found that culture is important for academic achievement and preparation for college; a student is expected to succeed academically to the extent that the curriculum is relevant to his or her culture. Researchers do not agree, however, on the best ways to strengthen low-income minority students' identification and subsequent connection to the institution of school.

According to Tinto's (1987) theories of college student retention, African American students should assimilate to the culture and values of the institution in order to succeed. Williamson (1999) disavowed this notion. Williamson (1999) studied the experiences of African American students at PWIs in the 1960s and 1970s. The students in the study faced racism and discrimination, and felt ostracized because they did not readily identify with the culture of their universities. Instead of committing what Tierney (1999) referred to as cultural suicide, discarding their shared experiences and values, the students created the social networks they needed for academic success

(Williamson, 1999). African American students created or insisted upon the creation of Black student unions, Black studies departments, and Black student organizations, and succeeded on their own terms. Williamson (1999) found that African American students, by injecting their culture into their college environments, met their own needs and thereby redefined academic success. Tierney (1999) also found that schools could adapt their curricula to become socially relevant to their students.

Researchers have found that when schools, as institutions, reflect the cultures of the students they educate, schools aid academic success (Cammorata, 2007; Tierney, 1999; Williamson, 1999; Meier et al., 1999). These researchers found that social integration could be enhanced by increasing the cultural relevance of curricula to low-income minority students, thus increasing academic success and ultimately educational attainment for these populations (Cammorata, 2007; Dumais, 2002; Tierney, 1999; Williamson, 1999). Intentionally building cultural relevance into curricula and into the fabric of academic institutions can promote the social integration and academic success of low-income minority students (Cammorata, 2007).

Cammorata (2007) studied a pilot curriculum with a social justice approach to learning that integrated core subjects with complex analyses of current social issues. The curriculum was created for low-achieving Latino high school juniors and seniors at risk of failing or dropping out of high school. These students had been tracked for failure and sorted into remedial level courses, in which they demonstrated little motivation to learn.

The pilot curriculum required students to complete a college-level, critical theory curriculum in lieu of the remedial education. In particular, lessons were taught using a critical theory primer, and required students to analyze the challenges of their everyday existence (crime, poverty, etc.) in light of what they were learning in their core courses (e.g. social studies, government, and math). The result of social infusion and increased academic challenge was that the students excelled above all expectations: 88 percent of students at-risk of failure graduated high school and 58 percent of the students attended college (Cammorata, 2007).

Students who completed the pilot curriculum became acutely aware of their SES, and the negative issues they would continue to face if they remained uneducated and socially immobile. By being aware of the world and their place in it (developing their habitus), the students were able to control and shape their learning experiences, understanding how their academics were culturally relevant to their lives. This example underscores the connection between cultural relevance and curriculum in promoting academic success and subsequent educational attainment for minority students.

The current research study focused primarily on college access for low-income minority students and the barriers that limit that access. To this point, the actual cost of attending college has not been addressed as a barrier to college access for low-income minority students. College costs have kept some students from attending college. However, the decision of whether to attend college is determined by other variables (e.g. student motivation; academic preparation; achievement ideology, levels of capital)

before a student is faced with the actual cost of attendance. Notwithstanding, college cost is an important consideration, worthy of further discussion.

Levine and Levine (1995) have collectively spent 60 years as practitioners and researchers of critical issues in urban education, including the issue of educational attainment for minority students. Their areas of expertise are urban schools and their interactions with other social institutions. Levine and Levine (1995) found that insufficient funding for tuition, a shift in federal aid from grants to loans, rising tuition costs, and higher college entrance standards were barriers to educational attainment for low-income minority students. Rising tuition costs (Lang, 1992) and shifts in federal aid from grants to loans (Levine & Levine, 1995) reduce the affordability of college and the number and type of colleges that low-income students can consider attending (Lang, 1992).

Summary

Understanding how to promote access to higher education for lower income minority populations is central to narrowing the gap in educational achievement, which has significant consequences for labor force participation, economic empowerment, and equity. To achieve equity in US, all subpopulations will need to participate equally in education and have equal access to the opportunities that education affords. With improved education, one can benefit in many ways. In addition to the benefits detailed in Chapter 1, common literature promotes the following benefits of obtaining a higher education: improved access to healthcare, better housing choices, decreased crime and incarceration, increased political power, improved social mobility, and lengthened life

span. All U.S. populations should have fair access to these benefits, and more importantly, to the opportunities to reach the full measure of their potential.

Of course, the first step toward obtaining a college degree is the decision to go to college in the first place. While we know that low-income and minority students attend college at rates disproportionately lower than their wealthier and White counterparts, we know little about what goes into their decision about whether to attend college or not. To achieve educational equity, low-income minority students must first enter college at rates comparable to their peers; then they will need to graduate college at much higher rates than they do today.

The purpose of this research was to understand how low-income and minority students, particularly Latinos and African Americans, make higher education decisions, including the decision of whether to attend college. Four questions guided this research. Chapter 3 describes the research methods and procedures.

Research Questions

1. How important are academic, cultural, and social preparation in the college attendance decision for low-income minority students?
2. How important are college tuition costs and funding in the college attendance decision for low-income minority students?
3. When academic preparation (graduation from high school completing a comprehensive curriculum) and funding (scholarships) are secure, what factors do low-income minority students consider when making their college attendance decisions? Which factors are most important?

4. What barriers do low-income minority students perceive limit their choices for higher education? Why do a disproportionate number of low-income minority students select two-year colleges over four-year colleges, even when tuition has been guaranteed?

CHAPTER III

THE METHODS AND PROCEDURES

Research Design

The purpose of this research was to explore the college attendance decisions of low-income minority students, and to identify the barriers that threaten that attendance. To accomplish this, the researcher completed a multi-ethnic case study of a not-for-profit organization with a mission to improve college readiness and increase college attendance for underserved students. The organization is hereafter referred to as “the program.” All students surveyed as part of this study were participants in the program. The program’s goal is to graduate students from high school prepared to successfully enter and graduate college. The program provides comprehensive college planning for students in low SES, urban, public schools.

Survey research was used to learn how students made their college attendance decisions, including the decision of whether to attend college. Survey research gave the researcher the potential to reach every student in the described population of program participants, who dispersed geographically throughout the country after graduating from high school. Survey research was ideal because this study assessed students’ behavior, attitudes, and past decisions, in addition to family background and other socioeconomic student characteristics (Singleton & Straits, 2005). Using survey research for this case study also minimized researcher influence by allowing respondents to complete the

survey on their own, without interacting with the researcher (in most cases). In addition to survey data collected from participants, this study also utilized student academic data from the program's databases.

Overview of "The Program"

Alleviating Barriers

The program provides opportunities for students who are traditionally underrepresented in higher education (mostly low-income and minority students) to earn a higher education. Furthermore, the program ensures tuition funding for all its graduates who choose to attend college. Program participants are required to apply for college and financial aid and scholarships (with the assistance of program advisors) to alleviate the burden of college attendance costs, including tuition, housing, and other expenses and fees. Two program advisors, who are employed by the program, work full-time at each high school the program serves. Currently, the program operates in three public high schools and two public middle schools within a large, southwestern U.S. city.

Insufficient funding for college is an obvious barrier to college attendance for low-income students. This research sought, among other goals, to explore barriers beyond finances, which limit college attendance. A significant characteristic of the program is the dedication of internal and external resources to provide financial assistance to its students. By providing tuition scholarships to program graduates, the program endeavors to alleviate the financial burden of attending college. In addition to funding, the program helps to manage college planning for students who decide to

attend college. Actively assisting students through college planning over four years in high school increases program participants' knowledge of college culture and admission processes.

The program has five main goals intended to parity college attendance and educational attainment for underserved students. The five goals are to (a) prevent high school dropout, (b) prepare students for college, (c) guide students through college admission processes, (d) help students secure funding for college, and (e) prepare students to graduate college. To achieve these five goals, three critical types of student support are offered. The next section discusses the three critical support areas (e.g., academic support, social support, and cultural support) as well as specific program components within each area.

Academic support. First, program advisors provide academic support and supplement the work of high school counselors, whose caseloads averaged 275-450 students in the schools where the program operates. (Average caseloads are calculated as the total number of students divided by the total number of counselors.) Having two program advisors dedicated to each campus full-time increases student participants' access to college counseling services.

Program advisors provide many forms of academic support to program participants. Program advisors routinely monitor students' grades, and work with counselors and teachers to help ensure that program participants receive tutoring as necessary. Program advisors also promote tutoring sessions for standardized tests, and register junior and senior program participants to take SAT and ACT exams. Program

advisors maintain ongoing communicate with students and counselors to help ensure that students are taking appropriate courses for college readiness. In addition to the aforementioned, the program also offers incentives to motivate students to excel academically; for example, one such incentive was an SAT/ACT exam contest that awarded financial prizes for top scorers at each school. Other incentives include academic celebrations each semester, which honor students who make the honor as well as students who achieve perfect attendance. The program advisors invite all students within each school to attend the academic celebrations, and all students of the school are eligible to receive awards and prizes, even if they do not participate with the program. Some of the high tech prizes that are awarded, such as iPods and laptops, are intended to close the digital divide between upper- and lower- economic classes.

Students work with program advisors to complete financial aid applications, including the Free Application for Federal Student Aid (FAFSA), and college admission applications, both of which are required for students to remain in the program. The program also requires students to complete private and community grant and scholarship applications, with the help of program advisors, to secure external funding for college, in addition to the scholarships (gap funding) offered by the program.

Social support. Social support is the second critical area in which the program assists participants. The program provides social support through group affiliation. The program utilizes peer influence in a positive way to create a camaraderie that supports academic excellence, as well as group affiliation within each high school. Group affiliation is enhanced through program meetings and field trips, as well as through

academic celebrations and through branding of apparel and other merchandise that is given to all program participants. The program also provides social support by teaching participants how to interact with members of the college community, especially professors, staff, and students who can support and aid program participants' success in college. To accomplish this, the program provides college campus visits, and encourages communication between students and college advisors about students' educational goals. During the campus visits, student participants also learn about the many resources that are available on college campuses, including writing labs and math labs, in addition to other academic support services that can help the students succeed.

In addition to teaching students how to communicate with the college community, the program offers a number of ongoing programs and activities that provide social support to program participants. Some of the ongoing programs include essay writing workshops, résumé writing assistance, and mock interview sessions, focused on college admission and job interviews. Additional field trips to local hospitals, corporations, and not-for-profit agencies provide hands-on opportunities for students to explore career interests. The program also offers full-time, paid summer internship opportunities for rising high school juniors and seniors, in partnership with city officials. The internships promote the development of professional work habits, skills, and communication styles. In addition to helping students strengthen their verbal and written communication skills, the program also facilitates interaction (thereby promoting relationship development) between students and the external not-for-profit and business communities. Finally, attending receptions and other programs hosted by

community organizations allows program participants to meet and network with people who have the knowledge and resources to assist them in reaching their goals, thereby developing their social capital. Cultural capital is increased through this engagement as well, as described in the next section.

Cultural support. Cultural support is the third critical area of support offered to program participants. Bourdieu (1986) described three types of cultural capital; they are embodied capital (appreciation of things that are valued by the dominant class), (b) objectified capital (owning things that are valued by the dominant class), and (c) institutionalized capital (earning credentials through institutions valued by the dominant class). The ultimate goal of the program is to develop participants' institutionalized capital through the attainment of a college degree; embodied capital is the primary form of cultural capital that the program tries to strengthen to accomplish this goal.

A series of life skills workshops is a major component of the program designed to increase students' cultural capital. Program advisors offer life skills workshops twice each month: one session for freshmen and sophomores and a second session for juniors and seniors. Program advisors facilitate life skills workshops; sometimes, external presenters or content materials are involved in the workshops. The purpose of the workshops is to teach students the norms, values, and beliefs of the dominant class so they will know how to align their values and behaviors with those taught. Topics vary by grade level, and focus on themes like managing time, investing in the stock market, taking notes, setting goals, academic honesty, planning personal finances, making decisions, exploring careers, and selecting a college. Program participants are required

to attend at least six of eight monthly life skills workshops each academic year. The workshops are offered as lunch programs during the school day and as after-school programs immediately after school, and do not interfere with regular academic classes. Parents and guardians also commit to attending workshops each year, although the lack of parent/guardian participation does not harm a student's ability to qualify for tuition funding.

The program provides cultural support also by assisting parents and students in understanding the processes of applying for college admission and financial aid, and exposing students to the values of the dominant class to aid their integration into academic and professional communities. As mentioned in the discussion on social capital, students also attend luncheons and dinners, and a multitude of receptions hosted by community organizations. These interactions not only increase students' social capital, but also their cultural capital. By engaging with professionals in the greater community, program participants are exposed to the values (punctuality), norms (professional appearance), and customs (dining etiquette) of the dominant class. As program participants become familiar with, and adopt the values and customs of the dominant class, they develop embodied capital, which will aid their integration within dominant society.

The program also educates students on issues related to intellectual life and fine arts. One of the ongoing initiatives focused on cultural support includes organizing student field trips to view films debuting during film premiers. Through the program's partnership with nationally renowned film organizations, students regularly attend film

premiers that included in-person chat sessions with film creators. This is a direct attempt to expose participants to the fine arts, and subsequently increase their embodied capital, by increasing their awareness and appreciation of the arts.

Currently in its infancy, the cultural support component will further develop to include trips to local museums, live theaters, and major financial institutions. In all cases, the program hopes to expose program participants to the types of experiences usually reserved for middle- and upper-class students, in hopes that they will pursue a higher education and be culturally prepared to enter and graduate college. As an aside, most of the aforementioned field trips were taken in the evenings, during weekends, and during the summer, with a few taking place during the regular school day with school administrators' permission.

Program Participation

Program advisors recruited the high school graduating class of 2008 during the students' freshman year in high school (2004-2005). All program graduates remained involved over four years, with the exception of a few students who were admitted by exception during their junior or senior years of high school due to special circumstances such as transferring to a participating school after the freshman year of high school, or demonstrating outstanding student conduct only late in the high school tenure.

Each year, program advisors invite all first year high school students to participate in the program with no regard to their academic accomplishments, financial need, or race/ethnicity. Program advisors give classroom presentations and provide information during lunch periods and in the hallways. Recruitment efforts inform

students and school staff about program components, requirements, and benefits, which include financial incentives for program participation and academic excellence, public recognition, technology incentives (e.g., iPod, video game, and laptop), as well as financial assistance to attend college. All students who actively engage with the program will be eligible for financial awards for college tuition, if needed. If a student secures full tuition funding through other external scholarships or grants, the student receives a technology package (laptop and printer) for college.

Program participants are required to complete a high school curriculum that includes three credits of science, four credits each of math, social studies/economics, and English/Language Arts, and a minimum of two years of the same foreign language, along with arts, technology, and electives as required by the state for graduation. Students are strongly encouraged to enroll in pre-AP (advanced placement) and AP courses whenever available. For full funding eligibility, participants are required to remain actively engaged in school, with a maximum of three unexcused absences, two disciplinary referrals, and no suspensions each school year from grades 9 through 12. In other words, the students need to commit wholeheartedly their time and energy through diligent involvement with the program, in order to maximize the benefits of being involved in the program, while preparing (with the help of program advisors) to enter college.

In previous years, the programs' initiatives were focused solely on high school students in grades 9-12, and although the students in this study were already in high school at the time, in fall 2008, the program implemented a middle school component

for grades 6-8. In fall 2008, program advisors began cultivating relationships with middle school students, through weekly roundtable discussions and academic celebrations. Upon entering high school, those affiliated students and others will be invited to join the program.

Selection of “The Program” as the Case Study Organization

As highlighted in Chapter 2, the literature consistently found that three of the issues that hinder low-income and minority students’ college attendance are (a) inadequate academic preparation, (b) little understanding of college admission processes, and (c) insufficient financial resources. The students in the program, however, have three major advantages over their peers. First, they prepare academically by completing a college preparatory curriculum. Second, they receive pro-active, long-term guidance through the college admission process, working with program advisors throughout high school. Third, they are guaranteed the financial resources needed for college tuition. Because of the myriad of services offered by the program, this case study is able to analyze the higher education decisions that students make when high school preparedness, college planning, and college costs are secured.

The program is particularly valuable as a case study institution because it reduces two key barriers to college attendance for low-income minority students; these barriers are insufficient college acumen and limited financial resources to attend college. By providing academic, social, and cultural support to program participants, the program seeks to alleviate other barriers that have traditionally prevented low-income and minority students from attending college.

According to Yin (1993), case study research is a preferred method for social science research when the researcher does not control behavior and events, and the issues being researched are contemporary, and provided current, real-life analyses (Yin, 1993). This research seeks perspectives of multi-ethnic students on sensitive issues, based on socioeconomics, race/ethnicity, and higher education decision processes. Case study research provides a contained context within which a complex phenomenon is inextricable. Such a strategy allows focused analysis of an otherwise infinite issue, inequities in education.

Equally important, using case study for this research provides convenient access for the researcher to the subjects of this study, because the researcher has a relationship with the case study organization. Through mutual relationships with the case study organization, the researcher and respondents share a common platform. This commonality helps the researcher to establish credibility and familiarity with the participants of this case study. Having access to students and program data allow the researcher to strengthen the quality of analyses, by merging academic and demographic student data (from program records) with students' responses.

In addition to the structural positives of the program for the purposes of this study, the researcher believes in its comprehensive programming and mission to parity educational attainment. The program philosophically recognizes that low-income students do not have disproportionately low levels of educational attainment relative to their peers simply because they lack the money to attend college. The program instead acknowledges and endeavors to alleviate the additional pervasive barriers to college

attendance and educational attainment that result from persistent deficits in capital for students with low socioeconomic status. The program does not attempt to parity education by just throwing money at the problem; instead, it provides holistically rich opportunities for program participants to learn and develop networking skills and work ethics (e.g., internship) that promote the development of social and cultural capital necessary to alleviate a variety of barriers that result from low financial capital. Moreover, the program holds students accountable for their outcomes by requiring students to work pro-actively with program advisors, and teaches them how to advocate on their own behalf. Therefore, the program is ideal for a case study because it allows the researcher to examine the college attendance decisions that low-income and minority students make when they are presumably prepared academically to attend college, and have funding for tuition.

Program Participant Population

The population included all students who were members of the program and who graduated high school in the spring of 2008. Two hundred eighteen program participants began as seniors in high school during the 2007-2008 academic year; 189 of them graduated in the spring of 2008. The remaining 29 students either (a) transferred to a school not served by the program, (b) did not graduate on time (repeated grade 12), or (c) dropped out of high school. (Unfortunately, program documents do not have data available for these 29 students.) Out of the 189 graduating seniors, 145 attended some form of postsecondary school immediately in the fall semester after graduating high school. Program participants attended college at much higher rates

(77%) than did other students in the state (52%) and the school district in which the program operates (36%). By the spring of 2009, 149 program graduates who graduated in the spring of 2008 were enrolled in college.

According to high school transcripts, the 2008 graduates were diverse by race/ethnicity and gender; approximately 70 percent of graduates were Latino, 25 percent were African American, and 5 percent were Asian, Caucasian, or other races. There were more slight males (52%) than females (48%) in the program. Household income was not available, but free and reduced lunch rates at each high school will serve as a proxy for household income. Participants graduated from one of three inner-city high schools; 79 percent of all students in the three participating high schools received free or reduced-price lunch. Therefore, the program participant population is presumed to be largely low-income. Table 3 presents demographic information for each participating high school.

The sampling plan was to reach all 189 of the program participants who graduated in the spring of 2008. The researcher used program documents to locate e-mail addresses and phone numbers of program participants in the 2008 graduating class. The researcher was able to locate contact information for 134 of the 189 students in the population. The resulting sample was drawn from the 134 students, and not the full 189. Over the course of four weeks, five e-mail attempts and one phone call were made to each of the 134 eligible students in the sample, resulting in 70 students who completed the survey. The response rate was 52 percent of students for whom contact information was located, or 37 percent of all graduating program participants.

Table 3. High School Demographics – Total High School Enrollment

High school	Total high school enrollment (rounded to nearest 100)	Ethnicity				Free/reduced lunch	Limited English proficient	4-year grad. rate
		Latino	African American	Caucasian	Other			
A	1,300	94%	5%	1%	0%	78%	27%	63%
B	500	18%	81%	0%	0%	78%	6%	68%
C	1,500	76%	17%	1%	5%	81%	32%	48%

Research Method

The researcher created two on-line surveys. One was for 2008 graduates currently attending college; the other was for 2008 graduates not currently attending college. Each survey had multiple sections, detailed below by survey.

Survey I - Currently Attending College

1. Educational experiences – This section assessed respondents’ current college enrollment status (school type and course load), ultimate educational goals, primary reason for wanting a college education, and examples of people in their communities who attended college.
2. Factors of influence (barriers) – Respondents indicated the importance of financial factors that affected their college attendance. Additionally, respondents reported on academic, financial, college preparation (college process knowledge), and personal factors that restricted, affected, and influenced their college attendance decisions. (These factors were stated negatively, such as low GPA vs. GPA.)

3. Decision-making – Respondents rated the importance of information and information sources, as well as variables related to college characteristics, college academics and majors, college recruitment, and advice received. Respondents reported each variable in terms of the importance of each in the college attendance decision.
4. Satisfaction – Section 4 asked respondents to consider how satisfied they were with their college attendance decisions, considering the type of college attended (public/private; 4-year/2-year, etc.), choice of major, and specific college attended. Respondents also shared their satisfaction with the decision to attend college.
5. Preparation and recommendations – In addition to social and cultural preparation for college, each respondent rated his/her perceived academic preparation for college and the likelihood that (s)he would graduate college. This section also asked respondents how their higher education decisions would have differed without the resources and guidance offered through specific components of the program.
6. Demographic information – Included gender, members in household, parents' education, and contact information. (See Appendix A for the complete survey.)

Survey II - Not Currently Attending College

Survey II is very similar to survey I, and many of the questions are the same as those posed in Survey I. Because the surveys are so similar, the next section highlights only important differences between the surveys. With the exceptions noted below, Survey II items parallel Survey I items, by section heading.

1. Educational experiences – This section asked respondents why they did not attend college. This section also asked respondents to identify reasons why people might attend college.
2. Factors of influence – Respondents were asked about the academic, financial, college preparation (college process knowledge), and personal factors that contributed to their decision to not attend college. The decision-making section was omitted in Survey II.
3. Satisfaction – Survey II omitted items from Survey I regarding college choice (type of school, specific school, and major). The omission effectively reduced this section to a query of satisfaction and dissatisfaction with the decision not to attend college, in addition to a query of whether the participant would have chosen to attend college if they could have chosen again. Furthermore, it asked what college they would have attended had they attended directly from high school.
4. Preparation and recommendations – Survey II did not ask participants how their plans would have differed without the resources of the program. Survey II

asked respondents' future higher education plans and timelines for those plans.

Other items in this section paralleled those of Survey I.

5. Demographic information – Included gender, household structure, and contact information. (See Appendix B for the complete survey.)

Independent Variables

Preparation

Participants in this study rated their perceived preparation to enter and graduate college. Preparation was rated in four categories: academic (achieving academically and mastering core content), financial (having enough money to pay for college – see financial section), social (understanding how to interact within the college community to aid student success), and cultural (knowing how to plan for college and manage the college admission process). Perceived preparation scores ranged from one (very unprepared) to five (very prepared). The five-point scale was recoded to a three-point scale, with response categories including unprepared, somewhat prepared, and prepared because it simplified statistical analysis, and logically, either the respondents felt prepared or unprepared, with no definable difference between feeling, for example, very unprepared and unprepared. Additionally, SAT and ACT scores, which are widely used by colleges to make admission decisions, were included as measures of students' academic preparation for college; these scores were obtained through program records.

Motivation

Low personal motivation to attend college has been identified in the literature as a second individual barrier to college attendance for low-income minority students (Cammorata, 2007; Dumais, 2002; Feagin et al., 1996). To learn if this was the case for program participants as well, respondents were asked to rate their perceived level of motivation to attend college from one (not motivated) to three (very motivated). Additional measures of respondent motivation included (a) ultimate educational goals, (b) reasons for attending college, and (c) grade level when the student first considered college attendance. These measures were included because they represent the educational goals of respondents as well as how they believe college will help them to reach those goals.

First, possible responses for ultimate educational goals ranged from earning a training certificate to earning a graduate degree. In addition to knowing their educational goals, knowing the reason why students are attending college can reveal internal and external motivations (reasons) behind their educational goals. Reasons for attending college included personal desire, family expectations, and social and economic mobility. The amount of time that a student has been committed to obtaining a higher education can also indicate the level of planning they have engaged in to reach their goals. Respondents could choose one of three grade levels to represent the period in their education when they first considered attending college: elementary (K-5), middle (6-8), and high school (9-12).

Student motivation can also relate to achievement ideology (I.e., educational aspirations, occupational expectations, and attitudes toward school) as well as goals one sets for oneself and reasons for pursuing them (Goldsmith, 2004, p. 121). Mickelson (1990) found that although minority students have high achievement ideologies regarding college attendance, they lack the examples of people in their communities who have achieved a college education. Even when they have such examples, they may not see the benefits that others have received as a result of attending college as readily as would non-minority students (e.g., minority college graduates, on average, do not earn wages that are comparable to non-minority college graduates with the same degree) (Mickelson, 1990). Therefore, although minority students were found by some scholars to have higher achievement ideologies than did non-minorities, the achievement was actualized at lower rates than non-minorities. Achieving a higher education requires behaving in a manner that is consistent with reaching one's goals (Mickelson, 1990). Mickelson (1990) found that without visible examples of the benefits of a college education, minority students are not inclined to behave in ways that are consistent with goal attainment. To measure their examples of college attendance, respondents were asked if they knew someone in their community who attended college, and if so, who (family, friends, etc.).

Social and Cultural Capital

The program aims to strengthen the social and cultural capital of its participants. Both forms of capital were reflected in the item that asked respondents' perceived preparation to attend and graduate college. Social capital represents the

communication, relationships, and networking that participants engage in that help them integrate into education institutions, and that can further their educational pursuits (Tierney, 1999). In addition to the two items that asked participants their perceived social preparation to enter and graduate college, social capital was measured by whether respondents had a mentor and by the marital status of their parents. It may be the case that single parents transfer lower levels of social capital to their children than do married parents, mostly because single parents are unable to spend as much time with children as married parents can spend (Yan, 1999). Therefore, it is important to know the marital status of respondents' parents as an indicator of the level of social capital that may have been transmitted between parent and student. As an indicator of parents' marital status, respondents indicated with whom they lived most of their childhood years (such as mother, father, both mother and father, grandparents, etc.).

Individuals who have high cultural capital possess the values and materials of the dominant class (Bourdieu, 1986). According to Bourdieu (1986), cultural capital is largely predicated on parents' education. Although schools do not create cultural capital, as institutions they promote and reward the possession of cultural capital (Kahlenberg, 2006; Dumais, 2002). Students with high levels of cultural capital communicate better with teachers, and are therefore more comfortable and identify more strongly with school than do students with low cultural capital (Dumais, 2002). High levels of cultural capital promote college attendance as well (Dumais, 2002; Bourdieu, 1986). However, low-income minority students are often distanced from the dominant cultural capital system within schools (Dumais, 2002). Parents' highest

education level served as one measure of cultural capital in this research; respondents were asked to indicate the highest level of education for both their mother and father, separately. Parent education was measured also because previous research has shown that children whose parents have attended college are themselves more likely to attend college (Bourdieu, 1973). Possible responses ranged from elementary school to graduate school (or unknown). Program components focused on cultural capital included college planning assistance and monthly life skills workshops. Respondents were asked to indicate how likely they would have been to attend college had they not had this support from the program. The five-point response scale ranged from “definitely would have attended” to “definitely would not have attended.”

Financial Considerations

Financial considerations of attending college included cost of attendance and sources of funding. Participants were asked the importance they put on the cost of attending college, and sources of funding to meet that cost. First, cost of attendance was separated into four components: books/supplies, campus housing, tuition, and technology. Participants ranked the importance of each of those variables, in conjunction with financial needs (grants, loans, and income). The relative importance of each of the seven items was ranked in relation to each other, with one being the most important, and seven being the least important.

The importance of financial considerations in the higher education decision was evaluated additionally through independent ratings of several financial components. Participants rated the importance of both tuition and housing costs, in addition to four

forms of financial aid (grants, scholarships, loans, and work-study), to their higher education decisions. Each component was rated from one (not important) to three (very important). Additionally, participants were asked how important program-provided funding was to their college attendance decisions, using the same scale.

To measure the importance of funding and its impact on the decision to attend college, three additional items asked participants who were currently attending college to speculate how the absence of funding would have affected their college attendance decisions. The first item asked how likely participants would have been to attend college without program funding. Responses ranged from one (definitely would not have attended college) to five (definitely would have attended college). The second item asked participants to speculate about how they would have otherwise paid for college without program provided funding. Respondents were allowed to choose multiple responses, including (a) no change; I received full external funding through scholarships, (b) would have borrowed from family members, (c) would have paid cash from family savings, (d) would have taken more parent loans, (e) would have taken more student loans, (f) would have delayed college attendance, and (g) would not have attended college.

Finally, participants were asked how the actual decision to attend college would have changed without program provided funding. The following statements were used to explore their alternative higher education decisions: (a) would have attended a 2-year college vs. a 4-year college, (b) would have attended college closer to home, (c) would have attended college in state vs. out of state, (d) would have lived at home vs.

campus housing, and (e) would not have attended college. The survey items regarding alternative plans for college funding and college attendance also allowed respondents to provide their own alternative responses.

Influence of College Characteristics, Academics and Majors, Recruitment, and Advice Received

To understand more fully, how low-income minority students make their college attendance decisions, it is helpful to know the information sources they sought, factors they considered, and the importance they placed on each. First, respondents were asked about the information sources they used, including the internet, college/university visits, media, and other people. Respondents were asked to select all of the sources, from a list of 18, which they used when making their college attendance decisions. In addition, the item allowed participants to fill in other sources not listed.

Knowing the factors considered by respondents provided additional insight into the information that was important to respondents as prospective college students, and how they sought the information that they needed to make their college attendance decisions. A broad spectrum of individual variables was grouped into five categories: (a) college characteristics, (b) college academics and majors, (c) college recruitment, (d) advice received, and (e) financial factors (previously discussed). Respondents indicated the importance of variables within each category to their decisions about higher education, assigning one of three ratings to each variable: not important, somewhat important, and very important. College characteristic variables included variables directly related to college campuses, such as (a) campus appearance, (b) average class

size, (c) distance from home, (d) ethnic/racial diversity on campus, (e) number of students enrolled, and (f) physical size of campus. College academics and majors variables included (a) assistance for undecided majors, (b) GPA requirements, (c) availability of desired major, (d) ranking of the major, (e) ranking of the college/university, and (f) SAT/ACT requirements. College recruitment variables considered by respondents included the recruitment methods used by colleges/universities to attract prospective students.

Respondents also rated the importance of (a) brochures, (b) college visits, (c) college fairs, (d) admission representatives at the high school, (e) early admission decisions, and (f) general websites. Advice received variables asked respondents about the people who gave them advice and the importance they placed on the advice. Respondents were asked to rate the importance of advice they received from multiple sources as follows: (a) church leader, (b) program advisor, (c) employer, (d) family, (e) friend, (f) school counselor, and (g) mentor. In addition to the responses previously mentioned (not important, somewhat important, and very important), respondents could select not applicable (N/A) for advice they did not receive. (For example, if respondents did not receive advice from their friends, they could select N/A for this source.)

Barriers to College Access

Respondents were asked about potential barriers to college attendance. Although the word “barriers” did not appear on either of the two surveys, participants were asked to identify all of the factors that may have restricted, affected, and influenced their

college attendance decision. Three barrier categories (in addition to the previously mentioned financial barriers) were presented in separate questionnaire items; the three categories were academic barriers, college preparation barriers, and personal barriers. All barrier items allowed respondents to write in their own barriers, and or select “none of the above.” All barriers were stated negatively (such as low high school GPA) to minimize misinterpretation. Academic barriers included (a) insufficient credits in core curriculum, (b) low GPA, (c) low SAT/ACT scores, and (d) low state-administered standardized content exam score.

College preparation barriers that may have affected higher education decisions included (a) lack of knowledge about admission processes, (b) limited knowledge of education options, (c) inadequate college planning and preparation, and (d) poor guidance through the college admission process. To learn which personal barriers (or limitations) students faced, respondents were asked to indicate all of the statements with which they agreed. The following statements were included as item choices to summarize the personal factors that may have limited higher education decisions.

1. Family/parent(s) wanted me to stay close to home
2. I wanted to stay close to home
3. I did not want to attend college
4. I wanted to work full-time
5. Family/parent(s) did not want me to attend college
6. Responsibility to help parents/family
7. Responsibility to raise child(ren) of my own

The barriers section included factors that may have limited respondents' college choices and access. Some circumstances, such as a desire to stay close to home, might not have been seen as barriers by the respondents; yet, we know that even these variables can limit the educational options considered by respondents.

Satisfaction with College Attendance Decisions

Unlike the other measures in this survey, which assessed the processes that led up to the decision to attend college, this item attempted to measure respondents' thoughts about their college attendance decisions after the decisions were made. Satisfaction and dissatisfaction with their college attendance decisions could indicate a student's likelihood of persisting through college to degree completion. Satisfaction was measured in three areas, including the decision to attend college, the college attended, and the academic major chosen. A five-point scale was used for this variable; the scale ranged from very dissatisfied to very satisfied, with "unsure" at the middle of the scale.

Respondents were also asked to share, in textual summaries, the reasons for their satisfaction and dissatisfaction with their higher education decisions. Respondents further indicated whether they would have chosen to attend a different college if given a chance to choose again. They also shared whether they would have changed the decision to/not to attend college at all. Both of the preceding items were coded as dichotomous (yes or no) variables. Finally, another dichotomous variable asked whether the respondents' current college was their first choice. Responses to this item could indicate the likelihood of transferring to another college, or could indicate that

additional barriers may have prevented respondents from attending their first choice colleges.

Dependent Variables

At the onset, this research sought to understand the variables related to college attendance (attending or not attending). The respondents in the sample, however, had a 93 percent college attendance rate. Because the majority of respondents did attend college, the primary dependent variable in this research is the type of college attended: four-year college/university, or two-year/community college. Primary analysis is performed on the type of college (2-year vs. 4-year) because the sample size of respondents not attending college was insufficient for comparative analysis. Secondary analysis is performed, comparing the independent variables to college attendance (attending or not attending).

Description of Sample

Sample Demographics

Program records identified students' race and ethnicity for comparative analyses of these variables; survey instruments did not ask students to identify their race and ethnicity. Identifying data, including name, gender, high school attended, and family status, was missing for 14 of the 70 respondents. Out of the 56 respondents who provided identifying information, 24 (43%) attended high school A, 8 (14%) attended high school B, and 24 (43%) attended high school C. The respondent sample was representative of the program participants by gender (near 50:50), with males representing 45 percent of the sample, and females representing 55 percent of the

sample. Male students attended college at a higher rate (82%) than did female students (76%). Analyzing the respondent sample by race finds that most (77%) of the respondents were Latino, consistent with population demographics; the sample was 18 percent African American, 3 percent Asian, and 2 percent Caucasian. Table 4 details race/ethnicity, gender, high school attended, and college type for all program participants who began the senior year in fall of 2007, graduating class of 2008 (189), 149 program participants who were attending college during the spring of 2009, in addition to the 70 survey respondents.

Further analysis revealed that in the final respondent sample, school B (a predominantly African American school) was undersampled, as were African Americans. School B enrolled 24 percent of college goers, but only 14 percent of School B's students responded to the survey. Likewise, African Americans accounted for 27 percent of college goers, and only 18 percent of respondent sample. Consequently, Latino students were over sampled in the respondent sample. In contrast to school B, school A was oversampled; school A enrolled 29 percent of the program's students yet 43 percent of respondents were from school A. The respondent sample was generally representative of the program's college going population by type of college attended. Refer to Table 4 for program population and sample demographics.

Table 4. Characteristics of the Program Participants (HS graduates), College Attendees, and Respondent Sample

Characteristic	High school graduates Fall 2007 N=189	College attendees Spring 2009 N=149	Respondent sample (70 respondents; 14 missing information) N=56
High School Attended			
A	29% (55)	29% (43)	43% (24)
B	24% (46)	24% (36)	14% (8)
C	47% (88)	47% (70)	43% (24)
Gender			
Male	42% (80)	44% (66)	45% (25)
Female	58% (109)	56% (83)	55% (31)
Race/Ethnicity			
African American	25% (47)	27% (40)	18% (10)
Asian	3% (5)	3% (4)	3% (2)
Caucasian	1% (2)	<1% (1)	2% (1)
Latino	71% (134)	70% (104)	77% (43)
Other race	1% (1)	0% (0)	0% (0)
College Type			
Not attending	21% (40)	0% (0)	7% (5)
Technical school	2% (4)	2% (4)	0% (0)
Community college	42% (80)	54% (80)	49% (34)
4-yr college/university	33% (65)	44% (65)	44% (31)

Note. Program records were not available for the 40 high school graduates who did not attend college.

Enrollment Status

The majority (93%) of respondents attended college; more respondents attended community colleges (40%) than four-year colleges (44%); 7 percent of respondents did not attend college. With 93 percent of participants currently attending college, college attendees were oversampled in this research; the program's college attendance rate was

77 percent. Participants who were attending college were completing the second semester of their freshman year at the time of this survey. Most of the students who were currently attending college (72%) were enrolled full-time; 16 (25%) of them enrolled in 15 or more semester credit hours. Eighteen (28%) were enrolled part-time; six (9%) of them enrolled in six or fewer semester credit hours. SAT scores were available for 46 participants; the mean combined critical reading, math, and writing SAT score was 1233, with a possible range of 600 to 2400. ACT scores were available only for 11 college attendees; the mean ACT score was 18, with a possible range of 1 to 36.

Instrumentation

This study invited respondents to complete one of two surveys. The “currently attending college” survey contained five sections noted in the research method section. The survey was an on-line questionnaire with 40 items in addition to a demographic section. There were 34 closed-ended items, many of which included a fill in box for student-generated responses, in addition to six open-ended items with textboxes for brief student narratives. Table 5 and Table 6 detail the items in each section of the two questionnaires.

Table 5. Currently Attending College – Item Description

Section heading	Item description	Closed-or open-ended
I. Educational experiences	Educational status	closed with “other” box
	Why attended chosen college	open
	Ultimate educational goal	closed

Table 5 (continued)

	Why desire college education	closed with “other” box
	Education of parents	closed
	Community members who attended college	closed with “other” box
II. Factors of influence	Most important information sources	closed with “other” box
	Relative rank of factors considered	closed with “other” box
	Academic barriers	closed with “other” box
	College preparation barriers	closed with “other” box
III. Decision-making	Information resources used	closed
	College; relationship; academic; financial; college admission factors	closed - Likert
	Presence of mentor	yes or no
IV. Satisfaction	Satisfaction with decision to attend college, college attended, major chosen	closed - Likert
	Satisfaction with higher education decisions	open – text boxes
	Dissatisfaction with higher education decisions	open – text boxes
	Desire for different choices	yes or no
	Changes desires	open – text boxes
V. Preparation and recommendations	Grade level when decided about college	closed
	Preparation to enter and graduate college	closed - Likert
	Motivation	closed – Likert
	Importance of financial awards	closed - Likert
	How college plans would have differed without program	closed
	Likelihood of attending college without program	closed – Likert
	Recommendations	open – text boxes
VI. Demographic information	Name, address, family status	varied

Table 6. Not Currently Attending College - Item Description

Section heading	Item description	Closed-or open-ended
I. Educational experiences	Educational status	closed with “other” box
	Why not attending college	closed with “other” box
	Ultimate educational goal	closed
	Reasons one might attend college	closed with “other” box
	Education of parents	closed
	Community members who attended college	closed with “other” box
II. Factors of influence	Most important information sources	closed with “other” box
	Relative rank of factors considered	closed with “other” box
	Academic barriers	closed with “other” box
	Financial; college preparation; personal barriers	closed with “other” box
III. Satisfaction	Satisfaction with higher education decisions	open – text boxes
	Dissatisfaction with higher education decisions	open – text boxes
	Current desire to attend college	yes or no
	Changes desires	open – text boxes
IV. Preparation and recommendations	Grade level when decided about college	closed
	Preparation to enter and graduate college	closed - Likert
	Motivation	closed – Likert
	Importance of financial awards	closed - Likert
	Future plans to enroll in college	closed
	Recommendations	open – text boxes
V. Demographic information	Name; address; family status	varied

Program administrators familiar with the content of the program provided information on educational attainment goals. The program aims to increase educational attainment for its students by focusing on college readiness, social and cultural competence, financial awards, college access, and college retention. Literature regarding college attendance and educational attainment and the barriers to college access faced by low-income minorities was reviewed. In addition to literature, the researcher obtained and reviewed program documents, such as strategic plans, student contracts, course outlines, and students' standardized test scores. A review of the literature and institutional documents served as the bases for the development of the survey instrument.

To maximize survey completion rates, the researcher introduced the study to program participants via e-mail. The introduction explained the research goals, methods, and procedures; the introduction also requested student participation (see Appendix C). The introductory e-mail message contained links to both of the surveys, and was sent initially to 134 of the 189 program graduates for whom e-mail addresses were available. The brief introductory script informed program participants about the purpose of the study and requested their participation in the study. The introduction further informed program participants of their rights not to participate, and that whether they participated had no impact on their status with the program. Finally, the introduction assured program participants that their confidentiality would be maintained when reporting research results. No names or identifying elements were kept attached to participants' responses.

The researcher offered incentives to increase the response rate of the survey. A \$25 Wal-Mart gift card was given to all respondents who provided their contact information via the on-line survey instrument. The introductory e-mail also informed program participants that they would receive the \$25 gift card if they participated in the survey. When tracking responses, the researcher recorded a “Y” next to the name of each student who participated and provided contact information for the gift card. This tracking allowed the researcher to make additional attempts to reach students who had yet to complete the survey. The researcher sent weekly e-mail reminders to all non-respondents. In addition, during weeks two, three, and four of the survey, the researcher made phone calls to students to solicit their participation. When called by phone, students were asked for a valid e-mail address to receive the survey via e-mail, and some students chose to complete the survey by phone. During the final week of data collection, the researcher promoted via e-mail three \$100 Visa gift card drawings. All students who participated in the research and provided their contact information were eligible. When students provided their names and contact information at the end of the survey [for purposes of receiving the gift card(s)], the researcher omitted their names from their responses for analysis so that students’ responses were not associated with identifying information. The University of Texas at Arlington Institutional Review Board approved the study.

Summary

This chapter presented the research method for the current case study, as well as the variables being measured and descriptions of how each was measured. Chapter 4

presents the findings of this case study. In chapter 4, responses of the 70 survey participants are combined with program record data in order to analyze the higher education decisions that respondents made, including the decision of whether to attend college, and which type of college to attend (four-year college or community college). Chapter 4 analyzes the relationships between independent variables and the dependent variables, college attendance and type of college attended. Finally, in chapter 4, research questions are answered regarding how low-income minority students made their college attendance decisions. Chapter 4 also explores how prepared students felt to enter college, and the factors they considered to make their college attendance decisions. In Chapter 4, the role of funding in the college attendance decision is presented, followed by a discussion of barriers to college attendance, and the reasons why low-income minority students in the study attended a community college more often than a four-year college.

CHAPTER IV

THE FINDINGS

Dependent Variable – College Attendance

The purpose of this research was to understand how low-income minority students made their college attendance decisions, including the decision of whether to attend college. To answer the research questions, a case study of participants in a college readiness and college access program was conducted, using survey research. Almost all respondents in this study (93%) were college attendees; 49 percent attended a two-year/community college and 44 percent attended a four-year college/university. The respondent sample was mostly Latino (77%) and African American (18%). The respondent sample was 45% male and 55% female. All respondents had attended one of three high schools in which the program operated during the 2007-2008 school year. Over 79 percent of students in the three schools received free or reduced lunch, indicating that they were from low-income households.

This chapter first presents descriptive statistics of four independent variables, (a) enrollment status, (b) student motivation, (c) educational goals, and (d) parental marital status and education, as they relate to the dependent variable, college attendance (and college type). Then, it explores how the conceptual independent variables [e.g. (a) preparedness, (b) financial considerations, (c) factors considered, and (d) perceived

barriers] related to college attendance. Because the overwhelming majority of respondents were currently attending college, college attendance, for the purpose of this research, was measured in two ways: whether a respondent attended college and the type of college attended (i.e., 2-year/community college or 4-year college/university). The latter was the primary measurement of this dependent variable. Finally, the summary integrates the findings to answer the four research questions presented in chapter 2. Findings are presented using descriptive statistics and, when applicable, chi-square tests and t-tests to determine relationships between independent and dependent variables.

Enrollment Status

The college attendance rate of the program far exceeded that of the school district in which it operates; 77 percent of program graduates attended college compared to 52 percent of all high school graduates in the state, and 36 percent of high school graduates in the school district where the program operates. Program participants had one main advantage over their peers who were not in the program. All program participants were guaranteed full tuition funding for in state, public colleges and universities. Although almost all respondents attended college, 49 percent attended community college, compared to 44 percent who attended four-year colleges. The reasons why respondents chose community college over a four-year college are explored in this chapter. Female students (62%) were more likely to attend a four-year

college than were male students (42%), although no statistical relationship was found between gender and college type [χ^2 (1, N=52) = 1.88, p = .171].

The majority of all college attendees were enrolled full-time; 72 percent were taking 12 or more semester credit hours. Students enrolled in four-year colleges/universities (M=14.03, SD= 1.6) took significantly more credit hours during the semester than those attending two-year/community colleges (M=10.09, SD= 3.5115) [t (63) = 5.72, p <.01]. Although all college attendees were expected to enroll full-time to remain eligible for unconditional funding renewal from the program, students attending four-year colleges were much more likely to be enrolled full-time compared to students enrolled in a community college. In fact, all of the four-year college students were enrolled full-time; only 47 percent of community college students were. Some part-time students were permitted to remain eligible in the program after undertaking a successful review process. A statistically significant relationship was found between the number of credit hours taken each semester and the type of college attended [χ^2 (2, N=65) = 22.70, p <.01].

Motivation and Educational Goals

Motivation promotes the attainment of educational goals for minority students (Goldsmith, 2004; Portes & Wilson, 1976), and a lack of student motivation has been named as a barrier to educational attainment for minority students (Cammorata, 2007; Dumais, 2002; Feagin et al., 1996; Steele, 1997; McDonald & McMillan, 2007). Notwithstanding, 68 percent of participants in this study, including those who were not

currently attending college, reported being very motivated to attend college. An analysis of the relationship between motivation and college type (Table 7) showed that a slightly higher percentage of respondents attending four-year colleges were reportedly very motivated (74%) compared to respondents attending two-year colleges (64%) or no college (50%). The findings were notable, but not statistically significant.

Table 7. Crosstabulation of College Type and Personal Motivation (N=56)

Motivation rating	College type		
	4-yr	2-yr	No college
Not motivated	4% (1)	0% (0)	0% (0)
Somewhat motivated	22% (6)	36% (9)	50% (2)
Very motivated	74% (20)	64% (16)	50% (2)

Although study participants reported high motivation to attend college, their goals were recently formed. Most participants reported coming to the desire for a higher education only during their high school years. Participants attending two-year (48%) and four-year colleges (52%) were equally likely to respond that they first began considering college while they were in high school. On the other hand, among those who had considered college before high school, 48 percent of them attended four-year colleges and 41 percent attended two-year colleges, compared to 11 percent who did not attend college. Refer to Table 8. Nonetheless, when respondents first considered

college was not statistically different by type of college attended [χ^2 (2, N=52) = 2.59, p = .273.]

Table 8. Crosstabulation of When Participant First Considered College and Type of College Attended (N=56)

Grade level	4-year college	2-year college	No college
Elementary school (K – 5 th)	37% (10)	20% (5)	25% (1)
Middle school (6 th -8 th)	11% (3)	24% (6)	50% (2)
High school (9 th -12 th)	52% (14)	56% (14)	25% (1)

To understand further respondents' motivation to attend college, respondents were asked why they desired a college education, if they did. The most frequently stated reasons were (a) to get a good job (N=56, 80%), (b) to have a better life than [their] parents had (N=50, 71%), and (c) to be exposed to new things and new experiences (N=48, 59%). In addition to the most popular reasons for desiring an education (listed in Table 9), three respondents suggested that they desired a college education to become more than they ever thought they could. This sentiment reflects the hope that these students have of being able to reach their goals, and the hope that a higher education will help them do that. Many of the responses reflect the idea that a college education can aid social and economic mobility (Goldsmith, 2004). Respondents reportedly saw education as a means to transcend their current

circumstances. Getting a job, doing better than their parents, earning money, being smarter, and having nice things reflect the hopes of respondents for a college education as a way to improve their lives. This is this is the essence of socioeconomic mobility.

Table 9. Why Participants Desired a College Education (N=70)

Reason	<i>f</i>	%
To get a good job	56	80
To have a better life than my parents had	50	71
To be exposed to new things and new experiences	48	69
To challenge myself	44	63
To make a lot of money	38	54
To experience "college life"	38	54
To become smarter	32	46
To meet my family's expectations	27	39
To have nice things	25	36
To get respect	22	31

Note. Multiple responses were permitted.

The literature has suggested that minority students, particularly African Americans, have higher achievement ideologies than do White students (Goldsmith, 2004; Portes & Wilson, 1976). Achievement ideology refers to the educational and occupation goals of students, as well as their attitudes toward school (Goldsmith, 2004). This ideology was manifested in students' educational goals; in general, minority students set high educational goals for themselves because they believe that education is necessary for social and economic mobility (Goldsmith, 2004). Since almost all of the respondents were minority students, comparisons of minority students' achievement ideologies and those of White students could not be made. Respondents' educational goals were measured as a representation of achievement ideology. Consistent with the

literature, the participants in this study had high educational goals. Almost 95 percent of all participants, including those who were not attending college, reportedly desired to earn a bachelor's degree or higher. No significant difference was found between the stated educational goals of four-year college students and those of community college students. Further, there was no significant difference between males and females in their desire to earn a college degree; 93 percent of females and 100 percent of males desired a bachelor's degree or higher. African American students (60%) were somewhat more likely than were Latino students (51%) to desire a bachelor's degree, but a greater percentage of Latino students (46%) desired to earn a graduate degree compared to African American students (30%), although these goals were not significantly different. Students attending college at four-year institutions (100%) and two-year institutions (93%) had almost equal goals of earning a bachelor's degree or higher, with one obvious and logical exception: none of the four-year college students intended to earn a training certificate or associate's degree. (See Table 10.) Regardless of where they began college (community college or four-year college), respondents reportedly intended to achieve the same levels of education.

Table 10. Crosstabulation of Educational Goal and Type of College Attended (N=70)

Ultimate educational goal	College type		
	4-yr	2-yr	No college
Training certificate	0% (0)	3% (1)	20% (1)
Associate's degree	0% (0)	6% (2)	0% (0)
Bachelor's degree	58% (18)	47% (16)	40% (2)
Graduate degree	42% (13)	44% (15)	40% (2)

Although their goals for educational attainment are generally higher according to the literature, minority students reach their goals at lower rates than do White students. One reason found in the literature is that minority students often lack real-life examples of individuals who have successfully completed college (Mickelson, 1990). According to Mickelson (1990), minority students also do not readily see examples from within their communities of the benefits that a college education provides for those who have obtained it. Subsequently, minority students tend to have abstract ideas (based more on thought and goals than on relevant life experiences), which do not translate into behavior modification to reach stated goals, and they therefore achieve their goals at lower rates than their White counterparts do (Mickelson, 1990). The concept of abstract ideas is consistent with the findings of Kao and Tienda (1998) as well.

Mickelson (1990) found that White and middle- to high-income students, conversely, have concrete ideas, formed by experience, with everyday examples of people who have benefitted from a college education; subsequently, they reach their goals at higher rates than do low-income minorities. To measure whether respondents formed their educational aspirations based on experience (concrete ideas), the current study asked participants if they knew people in their communities who attended college, and if so, who. Most of the respondents (80%) knew someone who had attended college, although few of them (20%) knew close family members who attended college. Community college students (87%) were more likely than four-year college students (80%) to report knowing someone who attended college.

Almost all of the respondents in this survey reported having friends who attended college. Few of them had family members who had attended college. Having friends who attended college may have contributed to the high college attendance rate within the respondent group (93%) and within the sample at large (77%). A possible explanation for higher college attendance rates for this group is the development of social networks through the program with established group norms and expectations of college attendance. Social capital is strengthened through relationships, networks, and group affiliation (Putnam, 2000). Bourdieu found that academic achievement and educational attainment were dependent on the expectations a student holds for people within their social class (Swartz, 1997). As mentioned in Chapter 2, group affiliation and peer support are two ways that the program strengthens the social capital of its

students. Seeing people from the same social class who attended college probably made respondents' goals of educational attainment more concrete and relevant to their actual experiences, and aided college attendance for the respondents in this study.

Concrete ideas of achievement have been found to aid goal attainment (Mickelson, 1990). Although low-income minority students have disproportionately low college attendance rates, the majority of respondents (56%) who knew someone who attended college, themselves attended four-year colleges and universities. The findings of this study were consistent with the literature, finding that the majority of students who knew someone who attended college also attended college. Differences by college type were not significant.

Parent Marital Status and Highest Education Level

Parents' marital status and educational attainment influence social and cultural capital, and subsequently the social and cultural capital of their children. As the literature illustrated, both social and cultural capital promote academic achievement, college attendance, and educational attainment. Attending college and earning a college degree exposes people to the values, norms, customs, and possessions of the dominant class. Possessing high levels of cultural capital, through their own education, would strengthen parents' knowledge of college preparation, admission, and funding processes, and help parents to assist their children in these processes.

Without strong cultural capital, however, parents rely on social capital to promote their children's educational pursuits. The literature found that social capital

was the easiest of all capital types for parents to build to aid their students' educational attainment. Even if parents have not attended college, and have low levels of cultural capital, they could establish strong bridging capital to promote higher education for their children (Putnam, 2000). Bridging capital includes the relationships, group affiliations, and social networks that connect parents to others who possess higher levels of cultural capital. Through bridging capital, parents can be exposed to the cultural knowledge needed to promote upward socioeconomic mobility for their children.

Yan (1999) found that single parents on average had less opportunity to interact with children than did married parents. Social capital is transmitted by parents to children and is strengthened through increased interaction between parent and child, particularly when that interaction is focused on their children's goals and other issues that are relevant to children (Yan, 1999). Because of the limited parent-teen interaction, Yan (1999) found that single parents transmit lower levels of social capital to their children than do married parents. This finding most likely implies that bonding capital may be lower for single parent households than for two parent households, because two parents would generally have more time to spend with their children (Yan, 1999). Single parenting was found to be one of many limitations to social capital building for low-income minority students (Yan, 1999).

The current study found a direct relationship between living with both parents and attending college. Respondents who lived with both parents were more likely to attend college, and more likely to attend four-year colleges than respondents who did

not live with both parents. Respondents who attended college (42%) were more likely to live with both parents than were respondents who did not attend college (20%). Additional analysis found that of all respondents who lived with both parents, 54 percent attended a four-year college, 43 percent attended a community college, and 3 percent did not attend college. Respondents who lived with both parents were most likely to attend a four-year college, and least likely to not attend college. Although the current study found a relationship between parents' marital status and their children's education, the reasons for this should be explored further. The current study does not imply that single parents cannot successfully promote and support college attendance for their children.

Previous research has found that children whose parents have attended college are themselves more likely to attend college (Bourdieu, 1973). This is because these parents possess higher levels of cultural capital compared to parents who have not attended college. Participants were asked their parents' highest education level attained. Only six percent of parents held a bachelor's degree (one 4-yr. college parent and three 2-yr. college parents); no parents had education beyond the bachelor's degree. Almost a third (31%) of parents had not completed high school; 43% of parents who had not completed high school did not even attend high school. (Refer to Table 11.) Parents of four-year college attendees had slightly higher levels of education ($M = 2.65$, $SD = 1.684$) than did parents of two-year college students ($M = 2.44$, $SD = 1.618$). The parents in this study had low levels of cultural capital, as measured by a lack of college

credentials. Notwithstanding, the majority of respondents in this study attended college. Regardless of their dominant cultural capital, parents can develop bridging capital to move students beyond the traditional outlook of their social class. The participants in this study, as with post-war African Americans, saw education as a way for upward mobility, and pursued it although people of their social class were not expected to do so (Swartz, 1997).

Parents can strengthen their children’s social capital by setting high educational goals and expectations, and supporting the same. In order for parents to increase students’ social capital, therefore, they must communicate with their child about their educational goals. When asked about the highest education level of their parents, however, 13 percent of respondents in this study did not know. The fact that some participants did not know the highest education level of each parent could indicate that the respondents did not know both parents (single parent), or that education was not discussed often in the household. If education is not discussed often in the household, it could therefore weaken social capital development.

Table 11. Highest Education Level of Parent with the Highest Education (N=70)

Education level	<i>f</i>	%
Did not finish HS	22	31
Graduated from HS	24	34
Some college	11	16
Bachelor's degree	4	6
Unknown	9	13

Respondents' Perceived Academic, Cultural and Social Preparation to Attend College

The literature suggests that students with high academic achievement as well as financial, social, and cultural capital are more likely to attend college than are students without such capital (Dumais, 2002, Yan, 1999; Bourdieu, 1986; Portes & Wilson, 1976). Having sufficient funding and the ability to succeed academically are important to college access. It is also important that students are able to build and maintain relationships that can aid their success (social capital), and that they understand the culture and processes of college (cultural capital).

Academic Preparedness

Poor academic preparation and underperformance on standardized tests are barriers to college access, and subsequent educational attainment for minority students (Fuller, 2002; Opp, 2001; Cantrell, 1999; Steele, 1997; Feagin et al., 1996; Levine and Levine, 1995). SAT and ACT scores and student perceived preparation were measures of academic preparedness in the current case study. SAT and ACT are two college entrance exams designed to predict first year college success; the tests are widely used by colleges to measure students' academic preparation for college, and to make admission decisions. Academic records maintained by the program that included program participants' SAT and ACT exam scores were accessed for this study. The average combined critical reading, math, and writing SAT score for respondents who attended college (1246) was higher than for respondents who did not attend college (1092). [Note. The maximum possible score is 2400.] Likewise, respondents at four-

year colleges (M=1303.64, SD = 212.727) had significantly higher scores than did respondents at community colleges (M=1183.50, SD = 196.047) [$t(40) = 1.90, p < .10$]. Comparisons by gender found that female respondents had slightly higher SAT scores (M = 1260.98, SD = 201.839) than did males (M = 1231.90, SD=224.513), although this difference was not significant. No differences were found by race; African American (M=1246, SD =197.190) and Latino students (M=1244, SD =194.136) earned roughly the same average SAT scores. Table 12 shows respondents' SAT and ACT scores, by percentile rank within the sample. SAT scores below 1076 were among the bottom 20 percent of all respondents' SAT scores; scores above 1440 were in the top 80 percent.

Table 12. SAT and ACT Scores of Respondents who Attended College, by Quintiles (SAT N=46; ACT N=11)

Percentile distribution of sample	SAT	ACT
20 th percentile (bottom)	1076	14
40 th percentile	1172	16
60 th percentile	1266	18
80 th percentile (top)	1440	22

Standardized test scores are important measures of academic preparation; also important is how academically prepared respondents perceive they are to enter and graduate college. All respondents rated their perceived level of academic preparedness to enter and graduate college on a scale of one (very unprepared/unprepared) to three (prepared/very prepared). Academic preparation to enter college was rated first. The

majority (55%) of respondents (including those who did not attend college) reportedly felt academically prepared to enter college; 14 percent felt unprepared. Respondents who did not attend college reported feeling academically unprepared more often (25%) than did respondents who attended college (14%). There was no significant difference between four-year ($M=2.48$, $SD = .753$) and community college ($M=2.36$, $SD = 2.36$) students regarding how academically prepared they felt to enter college [$t(50) = .60$, $p = .550$]. At the time they answered this question, respondents had already sorted themselves into community colleges or four-year colleges. The sorting, then, may have influenced how academically prepared they believed they were to enter the respective types of colleges they chose to attend, which could explain the lack of statistical differences in students' perceived preparation to enter college. The data revealed no statistical relationship between perceived academic preparation and college type.

In addition to rating their perceived academic preparation to enter college, respondents were asked to rate their perceived academic preparation to graduate from college. Although this variable was not directly related to attending college, it was included as a way to measure how confident respondents reportedly felt about their ability to complete coursework needed to earn a college degree. In addition, feeling prepared to actually graduate college might have affected respondents' initial decision to attend college. Although the majority of respondents felt academically prepared to enter college, only 41 percent felt academically prepared to graduate college; 20 percent reported feeling unprepared to graduate college. Only respondents who were currently

attending college reported feeling prepared to graduate college. No significant difference was found between feeling prepared to graduate college and the type of college attended [$t(50) = .27, p = .788$]. Neither was a significant difference found between African American and Latino students' feelings of academic preparedness to graduate college.

Cultural Preparedness

The second preparedness item focused on cultural preparation; in particular, the item asked all respondents to rate their perceived knowledge of college planning and their abilities to manage college admission processes. The majority of respondents (68%) reported feeling unprepared to manage the aforementioned college processes. Surprisingly, those who were not attending college reported feeling culturally prepared to attend college much more often (75%) than those who were attending college (29%). Comparing perceived cultural preparation of college attendees, however, found that four-year college students ($M=2.19, SD = .786$) reported feeling significantly more prepared culturally to attend college than did two-year college students ($M=1.72, SD = .737$) [$t(50) = 2.20, p < .05$]. This finding indicates that respondents who believed they understood how to plan for college were more likely to attend four-year colleges over community colleges. This finding underscored the important role of cultural capital to educational attainment (Dumais, 2002; Yan, 1999; McDonough, 1997; Bourdieu, 1986). If respondents' parents had attended and graduated college, the respondents in this study, presumably, would have been more likely to know how to plan for college, and

consequently would have felt better prepared culturally to enter college. Table 13 compares perceived cultural preparedness by college type.

Table 13. Crosstabulation of Perceived Cultural Preparedness to Enter College and College Type (N=52)

Cultural preparedness rating *	College type	
	4-yr N=27	2-yr N=25
Unprepared/very unprepared	22% (6)	44% (11)
Somewhat unprepared	37% (10)	40% (10)
Prepared/very prepared	41% (11)	16% (4)

* $p < .05$.

Respondents who were attending college were asked how likely they would have been to attend college without college planning assistance provided by the program. College planning components focused on (a) career exploration, (b) life skills training, (c) college advisement, (d) SAT/ACT test preparation and registration, and (e) college admission process navigation. Ongoing college planning was designed to strengthen participants' familiarity with the expectations and culture of college. Disturbingly, almost half (48%) of respondents reportedly would not have attended college without the college planning assistance offered by the program, even with guaranteed tuition funding. (See Table 14.) This finding underscores a very important point: more than money is needed to parity college access for low-income students. This research found that other factors (e.g., social and cultural capital, achievement

ideology) are also necessary to improve college access for low-income minority students.

Table 14. Likelihood of Attending College without College Planning Assistance from Program (N=52)

Response	<i>f</i>	%
Definitely would have attended college	12	23
Probably would not have attended college	4	8
Might/not have attended college	11	21
Probably would have attended college	19	36
Definitely would not have attended college	6	12

Social Preparedness

Student success in college does not happen in a vacuum. Successful students must manage relationships with peers, faculty, staff, and other members of the college community who can assist them with reaching their goal of obtaining a college degree. All respondents were asked to rate their perceived ability to comfortably interact with the college community (social preparedness) to enter college. The social preparedness item measured respondents' ability to interact with the college community in ways that would foster their academic success (such as social networking). Less than half (43%) of all respondents believed they were socially prepared to enter college; almost the same number (39%) believed they were socially prepared to graduate college. Respondents who attended four-year colleges ($M=2.26$, $SD = .859$) and community colleges ($M=2.16$, $SD = .800$) did not differ significantly in how socially prepared they felt for college [$t(50) = .43$, $p = .669$]. Table 15 compares perceived academic,

cultural, and social preparedness of all respondents (including respondents who did not attend college).

Table 15. Perceived Preparation to Enter and Graduate College (N=56)

Category	Prepared/very prepared to enter	Prepared/very prepared to graduate
Academic	31	23
Cultural	18	27
Social	24	22

Respondents who attended four-year colleges/universities rated their perceived cultural preparation for college much higher than respondents who attended community college. Respondents who did not attend college perceived that they had extremely low levels of social preparedness for college; none of the respondents who were not attending college reported feeling socially prepared to attend college. Of the three preparedness categories, respondents perceived that they were better prepared academically to enter college than they were socially or culturally. Cultural preparedness, however, was much more significant than academic or social preparedness to the type of college attended.

Tuition Costs and Funding

A financial preparedness item, similar in purpose to the preceding preparedness items, was intended to measure respondents' feelings of having sufficient financial resources to pay for college. The financial preparedness item used the same rating scale as the academic, social, and cultural preparedness items; all respondents were asked

about financial preparation to enter and graduate college. Overall, respondents indicated that they did not feel financially prepared to enter college. Among the four preparation categories surveyed (academic, social, cultural, and financial), respondents reported feeling least prepared financially to enter and graduate college; this is despite the program's guarantee of full tuition for college. Only 30 percent of all respondents said they felt financially prepared to enter college. Surprisingly more (34%) felt financially prepared to graduate college. Significant differences were not found when comparing by college type, race/ethnicity, or gender. This finding emphasizes how important college costs are to respondents' decisions to attend college; even when tuition is covered, other costs like housing and books that are associated with the cost of attendance can create additional barriers for low-income minority students. Because cost is so important, the belief that they have insufficient funding for college is also important.

To measure the importance of college tuition costs and funding in the college attendance decision for low-income minorities, respondents who were currently attending college were asked to rate the importance of college attendance costs (tuition cost and housing cost) and financial aid sources (grants, scholarships, student loans, and work-study) to their higher education decisions. Scholarships were the most important factor, rated very important by 90 percent of respondents. Scholarships were followed by tuition cost (81%) and grants (72%), in order of importance. Because respondents rated scholarships as more important than tuition costs, scholarships seemed to have

alleviated some of the concern about tuition and student loans. The mean rating for the aggregate of the financial factors was not significant to the type of college attended [χ^2 (2, N=58) = 4.08, $p = .130$]. However, analyzing each factor independently found that scholarships were rated most important of all financial factors, (90% rated very important), but was not statistically significant to college type [χ^2 (2, N=58) = .93, $p = .627$]. A statistically significant relationship was found between the type of college attended and both housing costs [χ^2 (2, N=58) = 8.45, $p < .05$] and grants [χ^2 (2, N=58) = 5.37, $p < .10$]. Housing costs were very significant to the decision of college type such that housing costs were significantly more important to four-year students ($M=2.39$, $SD = .832$) than two-year students ($M=1.77$, $SD = .817$) [t (56) = .05, $p < .01$]. Grants were also a more important consideration for four-year students ($M=2.82$, $SD = .476$) than for two-year students ($M=2.40$, $SD = .814$) [t (56) = 2.39, $p < .05$], most likely because college attendance costs are highest at four-year colleges. The final three variables, student loans [χ^2 (2, N=58) = 3.98, $p = .137$], tuition cost [χ^2 (2, N=58) = 3.63, $p = .163$], and work-study [χ^2 (2, N=58) = .02, $p = .991$] were not statistically significant to college attendance by college type. Table 16 depicts the rating of importance given for each financial factor.

Table 16. Importance of Financial Factors to Higher Education Decision (N=58)

Factor	Not important	Somewhat important	Very important
Scholarships	3% (2)	7% (4)	90% (52)
Tuition cost	5% (3)	14% (8)	81% (47)
Grants (need-based) *	12% (7)	16% (9)	72% (42)
Work-study program	21% (12)	36% (21)	43% (25)
Housing cost**	34% (20)	24% (14)	41% (24)
Student loans	38% (22)	26% (15)	36% (21)

Note. Not all rows total 100% due to rounding.

* $p < .05$. ** $p < .01$.

Rising tuition costs and a shift from grants to loans have been cited as barriers to educational attainment for minority students (Levine & Levine, 1995). Student loans were rated unimportant by 38 percent of respondents in this study. For some respondents, the program's guarantee of full tuition financing (through gap funding scholarships) may have alleviated the financial burdens of tuition and student loans, mitigating barriers created by college costs, and making college cost considerations secondary to funding considerations. If so, program-provided funding would therefore expand college choice for participants. Respondents who were currently attending college ranked the importance of multiple financial needs relative to each other: (a) tuition cost, (b) housing cost, (c) book cost, (d) technology cost, (e) loan needs, (f) grant needs, and (g) income needs. The ranking was from one (most important) to seven (least important).

In relation to other financial factors, respondents ranked tuition cost as the most important financial factor (2.53) that influenced their college attendance decision. Tuition cost was an important consideration for respondents, even with the guarantee of program funding for tuition. The need for grants was the second most important (3.69) financial factor that influenced college attendance. On the other hand, technology costs were ranked least important (5.00) to respondents. Table 17 displays the mean ranking for each financial factor.

Table 17. Financial Factors that Influenced College Attendance Decision, In Order of Importance

Category	N	Mean rank
Tuition cost	58	2.53
Grant needs	54	3.69
Income needs	51	3.71
Book/supply cost	54	3.76
Campus housing cost	55	4.53
Loan needs	54	4.63
Technology cost	57	5.00

Note. 1 is the most important; 7 is the least important.

This case study assessed the importance that respondents placed on program-provided funding, and the impact that respondents thought program-provided funding had on their college attendance decisions, particularly asking respondents to consider how their college attendance decisions would have differed without the funding. All respondents rated from one (not important) to three (very important), the importance of program-provided funding to their college attendance decisions. Program-provided

funding was rated very important by 93 percent of respondents. Ninety-one percent of four-year college attendees, compared to 90 percent of community college attendees, and 100 percent of respondents not attending college rated program-provided funding very important to their college attendance decision (N=55).

When respondents were asked how likely they would have been to attend college (using a Likert scale from *definitely would not have attended college* to *definitely would have attended college*) without program-provided funding, 67 percent of respondents said they would have attended college even without the funding. Four-year college students were more likely (66%) to say they would still attend college without program funding compared to two-year college students (62%). The fact that some students would not attend without money underscores the importance of money to the college attendance decisions. Considering that many more students said they would still attend college illustrates that students believed they would not have been deterred from attending college due to the absence of scholarship funding. Presumably, respondents would have found other means to pay for college, which would again highlight their high motivation to attend college. To test this last assumption and to further assess the impact of program-provided funding to the college attendance decision, respondents who were currently attending college were asked how the absence of program-provided funding would have altered their higher education decisions financially (plans regarding funding college) and structurally (plans regarding attending college). Two items provided insight into the impact of funding (or lack thereof) in the

college attendance decision for respondents. The first item addressed alternative financing; the second item addressed alternative college attendance plans.

When respondents were asked how they would have otherwise financed their college educations, 40 percent of respondents said they would have delayed college attendance without program-provided funding; 29 percent said they would have taken more student loans. Alarming, 27 percent of respondents said they would not have attended college at all. (See Table 18.) In further exploration, when asked how their higher education plans would have differed structurally, many respondents (40%) replied that they would have delayed college attendance. The respondents who said they still would have attended college said they would have likely (a) taken more student loans (29%), (b) borrowed more money from family and friends (27%), or (c) used family savings (27%) to pay for college. An equal number of respondents (28%) said they would not have attended college at all. (Table 19) The absence of program provided funding for college would have likely limited the higher education choices for respondents. When asked to consider financial alternatives for college, 40 percent of respondents said they would have delayed college attendance and 27 percent said they would not have attended college at all. When considering what changes they would have made to their college attendance decisions, 48 percent of four-year college students said they would have attended community college instead. Respondents who were attending college also said they would have lived at home or attended college closer to home without program-provided funding for college tuition.

Table 18. How College Attendance Would Differ Financially Without Program Funding (N=45)

Response	<i>f</i>	%
Would have delayed college attendance	18	40
Would have taken more student loans	13	29
Would have borrowed from family members	12	27
Would have paid cash from my/family savings	12	27
Would not have attended college	12	27
No change - I received full external funding through scholarships	10	22
Would have taken more parent loans	6	13

Note. Multiple responses were permitted.

Table 19. How College Attendance Would Differ Structurally Without Program Funding (N=50)

Response	<i>f</i>	%
Would have attended a 2-yr college vs. 4-year college	24	48
Would not have attended college	14	28
Would have lived at home instead of campus housing	13	26
Would have attended college closer to home	11	22
Nothing would change	6	12
Would have attended college in-state vs. out-of-state	4	8

Note. Multiple responses were permitted.

The Influence of College Characteristics, College Academics and Majors, College Recruitment, and Information Sources

Understanding how low-income minority students make their college attendance decisions necessitates knowing the information they sought, information sources used, and the importance they placed on each. Information was grouped into three categories: (a) college characteristics (e.g., enrollment and distance from home), (b) college academics and majors (availability of desired major and SAT/ACT requirements), and (c) college recruitment (college campus visits and college brochures). Knowing what

information is most important to low-income minority students and the sources they seek for that information can help high school counselors focused on college counseling to guide students through their college information searches. This knowledge can also help college administrators to make their information readily available in a manner that is accessible and desirable to prospective students who are planning for college. With this knowledge, college administrators can also help to strengthen the quality of the information they disseminate to prospective students.

College Characteristics

There was a statistical relationship between both campus housing availability [$t(56) = 5.05, p < .01$] and appearance of campus [$t(56) = 1.84, p < .10$], and the type of college attended. Both variables were significantly more important to four-year colleges students compared to community college students in the sample. A statistical relationship was not found between the remaining college information variables and the type of college attended, but the importance placed on those variables differed between respondents attending four-year colleges and those attending community colleges. Although these differences were not significant, they were notable.

The first notable difference was that proximity to home (whether close or far) was reportedly more important to community college students than to four-year college students. Having a campus close to home was somewhat more important to community college students ($M=2.30, SD = .750$) than to four-year college students ($M=2.14, SD = .848$). Having a campus far from home was also more important to community college

students ($M=2.07$, $SD = .740$) than to four-year college students ($M=1.96$, $SD = .744$). Considering the fact that some respondents attended community college out of town could explain this unexpected finding. For these respondents, it could be the case that they were determined to attend a community college, regardless of campus location. It is generally accepted that students who attend community college do so for one of three major reasons: feeling unprepared academically, feeling unprepared financially, or desiring to stay close to home. Considering that attending a community college away from home costs more than attending a community college near home (additional out of county tuition fees, and housing costs) suggests that financial considerations were not most important; obviously neither was staying close to home. In such cases, other variables (such as perceived academic, social, and cultural preparation) appear to have played a more important role in the college attendance decision.

The second notable finding (although not statistically significant) is that average class size, rated very important by 41 percent of respondents, was reportedly more important to four-year college students ($M=2.39$, $SD = .737$) than community college students ($M=2.10$, $SD = .712$). Ethnic diversity of both students and staff were equally rated very important by 12 percent of respondents; the ethnic diversity variables were most important to four-year college students. Finally, physical size of campus and student enrollment were rated very important by only 9 percent of respondents; both variables were more important to four-year college students than to community college students. (Table 20)

College Academics and Majors

This category of variables related to the academic majors offered by colleges, as well as the reputation of those majors and the colleges themselves, in addition to colleges' SAT/ACT and GPA requirements. Only two variables, SAT/ACT requirement and college major offered, were significant to the type of college attended, although they were both rated very important less often than all other variables in this category. The SAT/ACT requirement variable had the most significant relationship to the type of college attended, and was reportedly more important to community college students ($M=2.37$, $SD = .669$) than four-year college students ($M=2.00$, $SD = .609$) [$t(56) = -2.18$, $p < .05$]; 22 percent of respondents said this variable was very important. College major offered was rated more important by four-year students ($M=2.68$, $SD = .670$) than community college students ($M=2.33$, $SD = .711$) [$t(56) = 1.90$, $p < .10$]. This variable was also most often considered to be very important (62%), compared to other variables in this category. Other variables that were not significant to the type of college attended were (a) GPA requirements, (b) college ranking, (c) academic major ranking, and (d) assistance for undecided majors.

GPA requirement was reportedly very important to half of the respondents; four-year college students ($M=2.43$, $SD = .690$) and community college students ($M=2.43$, $SD = .568$) rated it equally important. Assistance for undecided majors, rated very important least often (22%) of all the college academics and majors variables, was also said to be more important to four-year college students ($M=2.07$, $SD = .766$) than to

community college students ($M=1.97$, $SD = .556$). A surprising finding was that community college students rated both college ranking and academic major ranking more important than did four-year college students, although the differences were not significant. (Table 20)

College Recruitment

College fairs and college representative visits to high schools were the two most significant variables to the type of college attended; both of these variables were rated more important to community college students than to four-year college students. When rating the importance of college recruitment variables, those with human interaction were rated more important compared to those without such interaction. Human interaction is a major element of both college fairs and college representative visits. The finding that low-income minority students in this study rated the human interaction variables most important is consistent with the preference of African American students in particular for active recruitment strategies that include face-to-face interaction compared to passive recruitment strategies (Feagin et al., 1996). Feagin et al. (1996) found that African American students complained about being recruited passively, while feeling that White students were recruited actively; they further felt that passive recruitment tools (such as brochures) hurt the efforts of PWIs to recruit minority students.

The college fair variable was the most significant in this category; community college students ($M=2.47$, $SD = .629$) rated this variable significantly higher than did

four-year college students ($M=2.11$, $SD = .786$) [$t(46) = -1.93$, $p < .10$]. The importance of college representative visits to the high school also differed significantly between community college ($M=2.17$, $SD = .791$) and four-year college students ($M=1.82$, $SD = .612$) [$t(56) = -1.85$, $p < .10$]. The other college recruitment variables were not statistically significant to the type of college attended, although they were important to respondents, especially four-year college students.

Respondents rated college campus visits most important (52%) among all college recruitment variables. As the next section discusses, college campus visits were also reportedly among the three most frequently used sources of information. Early admission was rated very important by 40 percent of respondents, and, as expected, most important to respondents who attended a four-year college. Early admission gives prospective students an opportunity to receive admission decisions before the priority admission application deadline (when most prospective students apply to colleges). This early admission allows prospective students to plan, receive financial aid awards, and to commit to their chosen college early, if admitted. Early admission is binding on the college and the student; selected students must attend the first college to which they are admitted, and universities must guarantee their spot in the entering class. Early action, in contrast, has many of the same benefits and is not binding on the college or the student. Both early admission and early action are referred to generically as early admission. College websites (29%), college brochures (21%), and other websites (10%)

were the least important variables in the college recruitment category, and incidentally, were passive recruitment variables. (Table 20)

Table 20. Importance of College Characteristics, College Academics and Majors, And College Recruitment (N=58)

College characteristics	Not important	Somewhat important	Very important
Campus close to home	22% (13)	33% (19)	45% (26)
Average class size	17% (10)	41% (24)	41% (24)
Campus housing availability**	29% (17)	34% (20)	36% (21)
Appearance of campus ^x	22% (13)	45% (26)	33% (19)
Campus far from home	26% (15)	47% (27)	28% (16)
Ethnic diversity of students	40% (23)	40% (23)	21% (12)
Ethnic diversity of staff	43% (25)	36% (21)	21% (12)
Physical size of campus	45% (26)	40% (23)	16% (9)
Student enrollment	47% (27)	38% (22)	16% (9)
<hr/>			
College academics and majors	Not important	Somewhat important	Very important
College major offered ^x	12% (7)	26% (15)	62% (36)
GPA requirements	7% (4)	43% (25)	50% (29)
Ranking of college/university	12% (7)	45% (26)	43% (25)
Ranking of academic major	14% (8)	45% (26)	41% (24)
SAT/ACT requirements*	14% (8)	53% (31)	33% (19)

Table 20 (continued)

Assistance for undecided majors	21% (12)	57% (33)	22% (13)
	Not important	Somewhat important	Very important
College recruitment			
College campus visits	14% (8)	34% (20)	51% (30)
College fairs ^x	16% (9)	40% (23)	45% (26)
Early admission decisions	12% (7)	48% (28)	40% (23)
College website	24% (14)	47% (27)	29% (17)
College representative at high school ^x	26% (15)	48% (28)	26% (15)
College brochures	24% (14)	55% (32)	21% (12)
Other websites	48% (28)	41% (24)	10% (6)

Note. Due to rounding, not all rows equal 100%.

^x $p < .10$. * $p < .05$. ** $p < .01$.

Information Sources

All respondents (attending and not attending college) were asked which information sources they used to make their college attendance decisions, and which of the sources were most important to those. Respondents said that program-provided advisors (86%), parents and family (48%), and college campus visits (34%) were used most often. In contrast to the most widely used sources, the three least used sources were (in descending order) internet search engines, Princeton Review website, and television; these sources are incidentally void of human interaction. These findings

again underscore the importance of human interaction to respondents' higher education decision-making processes. (See Table 21.)

In addition to indicating the information sources they used, respondents who were currently attending college were asked to select the three sources that were most important to their college attendance decisions. The data showed that the most widely used sources were also the most important sources to respondents: (a) program advisor, (b) parents and family, and (c) college campus visit. Respondents reportedly relied much more on program provided advisors (84%) than they did their school employed guidance counselors (13%), as information sources when making their college attendance decisions. As Table 21 depicts, program provided advisors were reported as the most widely used source of information, and the most important source of information for respondents making college attendance decisions.

Table 21. All Information Sources Used and the Most Important Information Sources

Information sources used (N=58)	<i>f</i>	%
Program advisor	50	86
Parent/ family	28	48
College campus visit	20	34
College fair	18	31
Friend	18	31
Statewide college application website	17	29
Teacher	17	29
Guidance counselor	14	24
College brochure	13	22
College Board	10	17
College website	9	16
College representative at high school	6	10
Internet search engine	3	5

Table 21 (continued)

Princeton Review	1	2
Television	1	2
<hr/>		
Information sources rated very important (N=64)	<i>f</i>	%
Program advisor	54	84
Parent/ family	36	56
College campus visit	17	27
Statewide college application website	13	20
Teacher	13	20
College fair	11	17
Friend	8	13
Guidance counselor	8	13
College Board	5	8
College representative at high school	5	8
Mentor	4	6
College brochure	3	5
College website	3	5
Princeton Review	1	2
Television	1	2

Note. Multiple responses were permitted.

Previous analysis of the influence of college characteristics, college academics and majors, and college recruitment, together with the analysis of information sources used revealed the resounding importance of relationships to respondents when making their college attendance decisions. To explore further the relationships that were important to respondents when making their college decisions, including whether to attend, respondents were asked to rate the importance, from one (not important) to three (very important) of the advice they received. Respondents could select N/A to indicate that they did not receive advice in a particular category. Respondents rated the advice given by their program advisors as the most important advice received; program advisor

advice was rated very important by 84 percent of respondents. Family member advice was rated very important by 78 percent of respondents. The advice of school-employed guidance counselors was rated very important much less often (47%) than was the advice of program advisors (84%).

Next, advice ratings were analyzed for the significance of each source of advice received, to respondents' selection of a four-year college or a community college. The data found that high school guidance counselor advice was the variable most statistically significant to the type of college attended, and was more important to four-year college students ($M=2.48$, $SD = .770$) than to community college students ($M=2.07$, $SD = .828$) [$t(53) = 1.90$, $p < .10$]. In contrast to guidance counselor advice, family members' advice was significantly more important to community college students ($M=2.87$, $SD = .434$) than four-year college students ($M=2.52$, $SD = .790$) [$t(51) = -1.89$, $p < .10$]. (Table 22) A separate item asked respondents if they had an adult mentor; 67 percent of community college students had a mentor, compared to 63 percent of four-year students. The most underserved participants in the program were most likely to need and therefore receive a formal mentor by assignment. Participants also had informal mentors through their employment, church, neighborhood, or program-provided internships.

Table 22. *Importance of the Advice Received*

Advice source	Not important	Somewhat important	Very important	Not used	N
Program advisor	3	5	47	1	56
Family ^x	5	5	43	2	55
High school counselor ^x	13	15	27	2	57
Mentor	13	10	21	10	54
Friend	5	29	21	1	56
Employer	20	14	9	11	54
Church leader	23	11	5	15	54

^x $p < .10$.

Perceived Barriers to College Access

The current research studied the college attendance decisions of low-income minority students, to understand how they made their college attendance decisions, including the decision of whether to attend college, and to understand the barriers that limited college access for this population. The research has uncovered some barriers, such as respondents' feelings of being unprepared culturally and financially to enter college, that limit college access for low-income minority students. In addition to those barriers already mentioned, all respondents were asked to tell about the academic, college preparation, and personal barriers that may have limited their college choices and access.

Three survey items were designed to reflect the concept of barriers without using the word barrier in the survey instruments, for three reasons. First, the word barrier was not used in the survey process because it has a negative connotation that could cause respondents to feel ashamed of the circumstances they faced (such as

needing to provide financial support for their parents). Second, the researcher has interpreted variables to be things that limit higher education choices as such, and did not want to project that bias onto the respondents. Third, some circumstances, such as a desire to stay close to home, might not have been considered as barriers by the respondents, and therefore, might not have been selected when asked to identify *barriers* they faced; yet, we know that even these variables can limit the educational options considered by respondents. All respondents were asked about the barriers that affected their higher education decisions.

The barriers items asked respondents to identify the academic, financial (see cost and funding section), college preparation, and personal factors that restricted, affected, and influenced (respectively) their higher education decisions. Items were stated negatively (such as low GPA instead of GPA), and multiple-responses and respondent-generated responses were permitted. Table 23 details the barriers faced.

Respondents who were attending college, and those who were not, indicated that their college decisions were influenced by similar factors. Respondents did not generally perceive academic barriers to college attendance; 63 percent of respondents indicated that none of the academic barriers affected them. This finding is consistent with respondents' general perception of being academically prepared to attend college. (Refer to the preparedness section.) Among all identified barriers, low SAT and ACT scores were reportedly the biggest academic barrier, faced by 30 percent of respondents. Having a low high school GPA was reportedly a barrier for 10 percent of respondents.

An additional five percent of respondents felt that they had insufficient credits in the core academic subjects, and three percent faced low state-administered exit exam scores. (Table 23)

College preparation barriers, such as limited knowledge about college or the admission processes, affected the higher education decisions of respondents, although 47 percent of respondents believed they faced no such barriers. The most pervasive barrier was limited knowledge about college. Even though they felt like their knowledge about college was limited, respondents did not seem to hold their program advisors and counselors accountable for this limitation; only five percent of respondents believed they received poor guidance to aid them in that area. Lack of knowledge about college or admission processes was a barrier for many students; 25 percent of respondents said they had limited family knowledge of the aforementioned and 23 percent of respondents said they themselves lacked such knowledge. This finding was consistent with respondents' low levels of perceived cultural preparation to enter college.

With low levels of cultural capital, bridging capital is necessary for a person to advance from one position of status to a higher position of status. According to Putnam (2000), the social ties that one makes with another through networking and interacting for common social, political, and economic purposes create bridging capital. The parents in this study, however, had limited exposure to higher education, and seemingly limited social connections to others who could strengthen their understanding of college

admission and funding processes. Thus, they were unable to provide strong bridging capital or guidance to help their students attend college. Inadequate college planning and preparation was a barrier for 22 percent of respondents. (Table 23)

Factors beyond a student's control can limit college access and educational attainment (Steele, 1997). Personal factors had important influences on the college selection of participants. Although proximity to home is not necessarily a barrier, the desire to stay near home can limit the number and type of colleges that a student would consider attending. In this study, 39 percent of respondents reported that a desire to stay close to home influenced their higher education decisions.

The most pervasive personal barrier that limited choices for higher education was a responsibility to help parents and family; 27 percent of respondents felt responsible for helping their parents and families. This finding is most likely due to the low economic status of the study participants. The need to provide for their families indicated a need for increased income in the household. This finding also suggests that financial barriers hindered college attendance or, in the future, could hinder educational attainment for these students. Respondents' need to provide for their families (parents, siblings, etc.) most likely limited the colleges that they considered attending because they would have most likely needed to attend college near home, and needing to work might have reduced the number of credit hours they enrolled in each semester.

In the chapter section on college characteristic variables, respondents expressed that they placed importance on distance from home when considering colleges. That

finding was consistent with the barriers section that found family and parents' desire for respondents to stay close to home limited the choices for 21 percent of respondents. Interestingly, when asked about the personal factors that affected college attendance, four students (7%) indicated that they did not want to attend college; however, all four of those students were currently attending college. Few of the respondents indicated a need to raise their own children (5%) as a barrier to their college attendance. Very few respondents said that a need to work full-time influenced their college attendance. Having family members and parents who did not want respondents to attend college was a personal barrier reported by only a couple of respondents.

(Table 23)

Examining the barriers that influenced respondents' college attendance decisions found that money, limited knowledge about college, and family needs and expectations influenced their higher education decisions. A lack of money was expressed through a stated need to provide for the family, and a need to work full-time. Limited knowledge about college has been a consistent finding of this research study. Without the understanding of how colleges work, or how to plan properly to enter college, students may face cultural and academic challenges later in their college tenures. Some respondents have already felt that poor academic preparation has affected their college attendance decisions, particularly due to low SAT and ACT scores.

Family considerations restricted higher education decisions in many ways. First, a lack of family and personal knowledge about college and admission processes

negatively affected higher education choices. Second, respondents felt a responsibility to provide financial resources for their parents and families, which most likely resulted in students attending college as inexpensively as possible. Further, this barrier may threaten the educational attainment of respondents if their families continue to rely on them for financial security. Third, a few respondents needed to care for their own children, a responsibility that might reduce the amount of time and money dedicated to college. Fourth, respondents reported that many of their family members and parents wanted them to attend college near home, or did not want them to attend college at all.

Table 23. Barriers that Influenced Higher Education Choices (N varies)

<i>Academic barriers (N=63)</i>		
	<i>f</i>	<i>%</i>
None of the above	40	63
Low SAT/ACT score	19	30
Low high school GPA	6	10
Insufficient credits in core academic subjects	3	5
Low state exit exam score	2	3
<i>College preparation barriers (N=64)</i>		
	<i>f</i>	<i>%</i>
None of the above	30	47
Lack of family knowledge of college or admission	16	25
Little personal knowledge of various education options	15	23
Inadequate college planning and preparation	14	22
Poor guidance through the college admission process	3	5
<i>Personal barriers (N=56)</i>		
	<i>f</i>	<i>%</i>
I wanted to stay close to home	22	39
Responsibility to help parents/family	15	27
None of the above	13	23
Family/parent(s) wanted me to stay close to home	12	21
I did not want to attend college	4	7
Responsibility to raise child(ren) of my own	3	5

Table 23 (continued)

I wanted to work full-time	2	4
Family/parent(s) did not want me to attend college	2	4

Note. Multiple responses were permitted

The current case study explored the reasons why respondents did not attend college by asking respondents who were not attending college to select all the reasons they did not attend college. (Multiple responses were permitted.) Financial issues presented the most pervasive barriers for the five participants who were not currently attending college. A majority of respondents (60%) believed that they did not have enough money to attend college. An equal number of respondents (60%) needed to work full-time, and therefore believed they could not attend college. In either case, finances were very important in the decision not to attend college. College costs were perceived to be too high, and funding sources were perceived inadequate for students to go to college. Respondents provided three additional variables that they believe explained why they did not attend college: (a) having inadequate knowledge of the college admission process, (b) being unprepared academically to attend college, and (c) lacking sufficient transportation to attend college. Sadly, even when tuition funding was secured through the promise of financial awards and scholarships, a lack of financial capital was still clearly a barrier to these respondents' college access.

Why Respondents Attended Four-Year or Two-Year Colleges

In addition to surveying barriers to college access, this research sought to identify the variables related to respondents' selection of a two-year/community college

or a four-year college/university. This research has highlighted differences between respondents who attended four-year colleges and respondents who attended community colleges. Most notably, community college students expressed the lowest levels of perceived academic and cultural preparation to attend college; they also expressed the lowest perceived financial preparation to attend college. In addition, two-year college students were most likely to be raised by single parents, which could limit interaction between parent and child, and thus social capital transmission between parent and child (Yan, 1999). A desire to stay close to home and a need to provide financially for parents and families were two additional reasons why respondents say they attended community colleges over four-year colleges.

This research has found many variables related to choosing a four-year or community college. In addition to those discovered, this study wanted to learn directly from respondents the reasons why they chose one college type over another. Respondents attending four-year colleges were asked why they chose to attend a four-year college over a community college. The most popular reason given was that the college/university offered the respondents' desired major (21%). The second most popular reason (15%) was to reach educational goals they had set for themselves. Almost as important were (a) the reputation of the college, (b) the desire to experience college life, and (c) a desire for a better job and better pay than they thought they could get through attending community college. Each of these reasons accounted for 12 percent of all responses. (Table 24)

Likewise, community college students were asked why they chose to attend a community college over a four-year college. The most common response (30%) was to complete core courses (basics) before transferring to a four-year college. This finding was consistent with the high educational goals set by all respondents, regardless of the type of college they were currently attending. Being able to attend college close to home was stated as a reason why 20 percent of respondents attended community college. Three additional reasons explained why respondents attended community college: (a) community college was less expensive than a university, (b) transportation was limited, and (c) students wanted to save money; each of these three reasons accounted for 10 percent of all responses.

In general, the reasons why four-year college students made their choice were couched in optimism, such as reaching one's goals, finding a good fit between the college and the student, and getting a better education than one's parents. Conversely, the reasons why community college students said they made their choice were, in general, less optimistic, and included the language of barriers, such as having limited transportation or needing to save money. If students were academically qualified to attend a four-year college, and had sufficient funding to do so, the reasons why they would attend a community college must be explored deeper. Chapter 5 presents recommendations for educators to increase college access for low-income minority students, especially focusing on helping students to attend a four-year college/university. (Table 24)

Table 24. Why Respondents Attended Four-Year or Two-Year Colleges

Why respondents attended four-year colleges (N=34)	<i>f</i>
Academic major offered	7
To reach educational goals	5
Reputation of college	4
To experience “college life”	4
To get a good job and good pay	4
The college was a good fit	3
To improve self	2
To go to school away from home	1
To have a better education than parents did	1
To meet family expectations	1
Took advantage of a good opportunity	1
Program advisor advice	1
Scholarships offered	1
Why respondents attended community colleges (N=30)	<i>f</i>
To complete core courses (basics)	9
College was close to home	6
College was less expensive than a university	3
Limited transportation	3
To save money	3
Denied admission to a university	1
Need to support family	1
Only option available	1
To earn an associate's degree	1
To try college first	1
Plan to join the military after community college	1

Satisfaction with Higher Education Decisions

After respondents had made their college decisions, and had lived with the results of those decisions, they were asked what satisfaction and dissatisfaction they had with their higher education decisions, including the decision of whether to attend

college. Additionally, respondents were asked whether they would have changed their initial decision to attend college if they had a chance to choose again. Although this research segment was focused primarily on college access, satisfaction was included as a predictor of the likelihood that students would persist through college graduation (educational attainment) or even enroll in college later if they were not currently attending college.

Improving educators' understanding of how low-income minority students feel about the higher education decisions they have made will allow them to share meaningful information (from previous students' experiences) to aid other low-income minority students in making the best higher education decisions they can, for themselves. Educators in particular can help low-income students who are academically prepared to attend four-year colleges/universities directly from high school. Educators can do so by mitigating the barriers over which they have some control [e.g., academic, social (parent-school interactions), and cultural preparedness to enter college] that can limit college access for low-income minority students. Chapter 5 discusses college matching further.

Satisfaction of Respondents Who Were Currently Attending College

Current college students shared their satisfaction and dissatisfaction with three decisions: (a) the decision to attend college, (b) the particular college attended, and (c) the academic major chosen. Respondents were generally satisfied with their higher education decisions in all three areas. An overwhelming majority of respondents (89%)

were satisfied with the decision to attend college. Additionally, 81 percent were satisfied with their chosen college. Finally, 74 percent were satisfied with their academic majors. Current college students said that they were most satisfied with the decision to attend college, and least satisfied with the college major selected, as depicted in Table 25.

Table 25. Satisfaction with Higher Education Decisions Decision to Attend College

Decision to attend college (N=53)	<i>f</i>	%
Very dissatisfied	3	6
Dissatisfied	0	0
Not sure	3	6
Satisfied	12	23
Very satisfied	35	66
College/university selected (N=52)	<i>f</i>	%
Very dissatisfied	1	2
Dissatisfied	3	6
Not sure	6	12
Satisfied	26	50
Very satisfied	16	31
Academic major selected (N=51)	<i>f</i>	%
Very dissatisfied	2	4
Dissatisfied	1	2
Not sure	10	20
Satisfied	22	43
Very satisfied	16	31

Respondents who were currently attending college were asked to write-in the reasons why they were satisfied and dissatisfied with their college attendance decisions. These responses were organized by theme. Respondents said they were most satisfied

(28%) with acquiring new knowledge. Additionally, respondents were apparently satisfied because they were experiencing a new environment (22%), and setting goals for themselves (22%). The three most popular reasons for student satisfaction centered on the themes of new experiences (new knowledge, new environment) and goal setting. Equal satisfaction was expressed with (a) the decision to attend college, (b) the choice of academic major, and (c) the opportunity to improve their lives (socioeconomic mobility). Each of these satisfaction reasons accounted for 20% of all responses. (Table 26)

Respondents who were currently attending college also shared the reasons why they were dissatisfied with their college attendance decisions. The primary reason for dissatisfaction (26%) was the heavy workload (homework, studies, and exams) to which the respondents were unaccustomed, although they had been admitted to college and were presumably college ready. (Remember that Kahlenberg (2006) found that grades given by teachers in low-income school districts were weak indicators of academic achievement compared to middle class schools.) Respondents' dissatisfaction with the heavy workload is a contrast to their stated beliefs that they were academically prepared to enter college. However, respondents did cite low SAT and ACT scores (designed to predict academic success during the first year of college) as a factor that restricted their higher education decisions. In addition to the workload, almost as many respondents (20%) said they were dissatisfied with their choice of college. Respondents were equally dissatisfied with their choice of academic major (15%) and distance from home

(15%). Concern for money was an additional source of dissatisfaction for current college attendees (15%). (Table 26)

Table 26. Reasons for Satisfaction and Dissatisfaction with Higher Education Decisions

Satisfaction theme (N=54)	<i>f</i>
Knowledge gained	15
Experiences in a new environment	12
Having goals set for one's self	12
Making the decision to go to college	11
Opportunity to improve one's life	11
Choice of college	11
Choice of major and/or classes	9
Distance of the campus from home	8
Learned to become more responsible and independent	7
Social relationships made	6
Made the family proud	6
Affordability of college	4
Others	7
Total responses	119
Dissatisfaction theme (N=46)	<i>f</i>
Heavy workload	12
Choice of college	9
Choice of major and/or classes	7
Distance of the campus from home	7
Financial concerns	7
Having a job	4
Dislike for the professors	4
Stress that college brings	3
Regrets about going to college	3
Preparedness for college	3
Lack of "college life" experience	3
Personal reasons	3
Others	5
Total responses	70

Note. Multiple responses were permitted.

To explore further respondents' satisfaction with the decision to attend college, respondents who were currently attending college were asked whether they would switch colleges if they could choose again. This satisfaction item found that 81 percent of respondents expressed satisfaction with the college they chose (Table 25), although 38 percent said they would have chosen to attend a different college if given a chance to choose again, for the reasons shown in Table 27. Perhaps even respondents who were satisfied think they could be even more satisfied at a different institution. Furthermore, 51 percent of current college attendees said their current college was not their first choice when they graduated from high school. An assumption could be made that either (a) the remaining 23 percent are working to make good their initial college choice, (b) they do not believe another college would satisfy them more than the current one does, or (c) the decision cost of switching colleges is greater than the cost of staying. Finally, current college students overwhelmingly (96%) said they would not choose to forego college if given a chance to choose again. Overall, respondents were much more satisfied with the decision to attend college than with the particular college or academic major they chose.

When asking respondents if they would have chosen to attend a different college than their current one, 38 percent responded, "yes". Those respondents were asked why they would have chosen a different college. Two responses were provided more frequently than all others were. First, 23 percent said that their current college lacked a sense of college life. Remember that a desire to experience college life was a reason

why 12 percent of respondents said they attended a four-year college. The second reason, given by 23 percent of respondents, for wanting to attend a different college was a desire to attend a university instead of a community college. Some respondents did not like the location of their current college; 14 percent of respondents wanted to attend college away from home. Interestingly, an equal number (14%) of respondents wanted to attend college closer to home. Finally, 9 percent of respondents said their current colleges, which are community colleges, feel too much like high school. Table 27 summarizes responses. The findings again highlight the importance of college matching to help increase college student satisfaction and subsequent success. College matching will be discussed in Chapter 5.

Table 27. Reasons for Wanting to Attend a Different College (N=20)

Theme	<i>f</i>	%
Lack of "college life" experience	5	23
Want to go to a university instead of community college	5	23
Want to go to a college away from home	3	14
College is far from home/not good location	3	14
Community college feels like high school	2	9
Others	4	18

Four participants who were not currently attending college shared reasons why they would attend college if they could choose again (one did not answer). All four respondents intend to enroll in college in the future: one intends to enroll during the current (2008-2009) academic year, two desire to enroll during the following year (2009-2010), and one is unsure about when. The four respondents shared their

satisfaction and dissatisfaction with their higher education decisions. Satisfaction reasons included (a) being able to save money, (b) having the freedom to do what they want, (c) getting better pay, and (d) knowing they will not be in college forever. Two respondents expressed eagerness to return to school in the fall. Although they all shared reasons for being satisfied, they also shared reasons for being dissatisfied: namely that they did not attend college [and believe they should have] or that they did not attend college right after high school. Boring lectures was an additional reason given for dissatisfaction about college.

Respondents' Recommendations for the Program and Public Schools to Better Prepare Students for College

In addition to providing their perspectives and insights into how they made higher education decisions, respondents made recommendations to improve the program so that more students like themselves would successfully graduate high school and attend and graduate college. Respondents also recommended ways for public schools to strengthen student preparation for college. Respondents most frequently said that the program does not need to be improved (30%). Another 19 percent of respondents would like more activities and meetings. One-on-one interaction between program advisors and students was desired, indicated by 17 percent of respondents who wanted advisors to be more aggressive in following up with students. Additionally, respondents wanted increased emphasis on success; 8 percent recommended that the program motivate students to promote student success, and another 8 percent wanted

the program to emphasize the importance of academic achievement in high school. (Table 28)

Respondents also recommended ways for public schools to better prepare students for college. The most common responses were that teachers should better teach students and that schools should plan more college fairs for students; each response yielded 12 percent of all responses. Two additional recommendations were to expand the program into other schools (10%) and to plan earlier to prepare students for the financial, social, and emotional demands of college (10%). The program, incidentally, has noticed the same need in public schools, and plans to expand its into one additional high school and three additional middle schools in the 2009-2010 academic year. At that time, the program would be operating in four high schools and five middle schools, all within the same school district. Table 28 summarizes student recommendations for the program and for public schools.

Table 28. Student Recommendations to Improve the Program and Public Schools to Better Prepare Students for College (N varies)

Ways to improve “the program” (N=47)	<i>f</i>
Nothing/everything is good	14
Have more activities and meetings	9
Aggressively follow-up with the students	8
Motivate students to succeed	4
Emphasize the importance of doing well in school	4
Have more staff to assist students	3
Start intervention before high school	3
Better organize programs and events	2

Table 28 (continued)

Ways to improve public schools (N=49)	<i>f</i>
Teachers need to teach better	6
Plan college visits/fairs	6
Expand “the program” to more public schools	5
Plan early with students (freshman year) to be academically, mentally, and financially ready for college	5
Teachers should be involved more with students	4
Encourage students to take Advanced Placement (AP) classes	4
Have more activities and information for students	4
Encourage students to apply for scholarships	3
Improve curriculum/subject areas	3
Prepare students mentally for college	3
Motivate students to go to college	3
Students and counselors should talk more often	2
Stress independence	1

Note. Multiple responses were permitted.

Summary

Levine and Levine (1995) found that insufficient funding for tuition, a shift in federal aid from grants to loans, rising tuition costs, and higher college entrance standards were barriers to educational attainment for low-income minority students. So too, respondents in this study said that these factors influenced their college attendance decisions. The participants in this study were guaranteed college tuition funding through the program, provided in hopes of increasing college access for populations that have been underrepresented in higher education. Even when tuition funding was guaranteed, respondents still said they based college attendance decisions in part on financial factors, such as housing costs and grants availability. Respondents said that

college attendance costs and income needs were important factors when deciding whether to attend a two-year or a four-year college.

The participants in this study reported considering many important financial factors when making their higher education decisions. Lack of money and uncertainty about how to pay for college tuition were important financial considerations, even when college tuition funding was guaranteed. However, it was more than money that explained why some students, with the guarantee of tuition funding, chose to attend two-year colleges, or not to attend college at all. Academic, social, and cultural preparation, in addition to financial preparation, all were essential to college attendance.

The majority of respondents attended a two-year/community college, however, although they said they felt academically prepared for college and despite having guaranteed college tuition funding through the program. Participants perceived that low SAT/ACT scores limited their higher education choices (although they generally reported feeling academically prepared for college). Additionally, a desire to stay near home and a need to provide for parents and family were reportedly important factors that affected participants' higher education decisions.

Low cultural preparedness to enter college was pervasive among study participants. A poor understanding of the processes of planning for college and applying for college admission were said to be a major barrier to college access. Participants generally reported feeling better prepared academically and socially than they did financially and culturally to attend college. The strong relationship between

cultural preparedness and college type indicates a perceived barrier that limits college attendance for low-income minority students. Namely, students reported feeling ill prepared to navigate the college admission processes. Additionally, feeling culturally unprepared could explain why a disproportionate number of low-income minority students in this study selected two-year colleges over four-year colleges, or did not attend college at all. Advice received, especially the advice of program-provided advisors and family members, was said to be very important to respondents. Additionally, of the many sources of information used, those that required human interaction (e.g., college campus visits) were rated more important than were those without such interaction (e.g., college brochures and websites).

The literature was consistent in its assertion that financial, social, and cultural capital played critical roles in promoting educational attainment. Unfortunately, low-income minority students have been generally found to have relatively low levels of such capital, presenting a formidable barrier to college access and educational attainment (Dumais, 2002, Yang, 1999; Bourdieu, 1986; Portes & Wilson, 1976). Chapter 5 presents a discussion of these findings, implications for education, and recommendations for future research.

CHAPTER V

THE DISCUSSION

The rates at which low-income and minority students attend college are disproportionately low compared to their wealthier and White counterparts. Latino and African American students in particular attend college at rates lower than their representation in the U.S. population would suggest. As the U.S. populations of Latinos and African Americans continue to grow, the need for these populations to earn a higher education will become increasingly important to parity in educational attainment.

The reasons for the gap between the educational attainment of low-income and minority students and that of their wealthier and White counterparts have been debated in the literature. Some of the literature has focused on racial and ethnic disparities in educational attainment. The literature found that minority students lack the motivation and academic preparation needed to attend and graduate college. Other literature has focused on socioeconomic disparities, and has found that because low-income students live in underserved communities, they do not attend quality K-12 schools, and are therefore academically unprepared to enter college. The current case study acknowledges that issues related to economic status are intertwined with those related to race and ethnicity. With that acknowledgement, this research provides an

understanding about which of the barriers found in the literature affected the respondent sample, and how these barriers influenced college attendance decisions.

Previous studies have focused primarily on financial and academic barriers to educational attainment for low-income minorities. The current study found that financial and academic barriers to college access are important; equally if not more important is the need for students to be socially and culturally prepared to enter and graduate college. To alleviate the pervasive gaps in academic achievement, college access, and educational attainment, this research focused on the college attendance decisions that low-income minority students made when they had successfully completed high school, and were guaranteed scholarships to pay for college tuition. The purpose of this study was to understand how low-income minority students made their higher education decisions, including the decision to attend college, and to learn the factors that influenced those decisions, including the barriers that students perceived limited their higher education choices and college access.

To fulfill the research purpose, the researcher performed a case study of a not-for-profit organization that is committed to improving college readiness and increasing college access for underserved populations. The researcher completed a survey with the population of program participants who graduated from one of three urban, low SES, public high schools in the spring of 2008. The case study organization was chosen, in part, because it has a history of successfully combating two of the most pervasive barriers to college attendance for low-income and minority students: inadequate

academic preparation, and insufficient funding for college tuition. Additionally, by providing academic, social, and cultural support to program participants, the program has had positive results; the program's high school graduation rate was 87 percent with a college attendance rate of 77 percent; the latter is more than twice the college attendance rate of the school district in which the program operates (36%).

Contribution to the Literature

This study contributes to the literature by furthering the exploration of barriers and other variables, such as inadequate social preparation for college, that affect low-income minority students' college attendance decisions. These decisions include the choices of (a) whether to attend college, (b) what type of college to attend, and (c) which specific college to attend. This study is also significant because it provides low-income minority students' first-hand perspectives on issues of college access and college attendance decisions. This study is significant to college access literature also because it expands upon previous research, and analyzes college attendance for low-income minority students who had two main advantages over their peers: (a) they had completed a college preparatory high school curriculum and (b) they were guaranteed funding for tuition upon enrolling in college. Yet, many of the issues highlighted in the literature were also present in the current research findings as well. Educators and counselors could benefit from understanding why some students do not pursue college, and why others choose to attend two-year colleges over four-year colleges. This understanding can help educators better prepare students for college. Additionally,

understanding the cultural and social barriers, in addition to economic barriers, that limit college access for low-income minority students can help educators alleviate those barriers over which they can have some control.

Key Findings

Low motivation and inadequate academic preparation have been blamed for the disproportionately low college attendance rates of low-income minority students (Cammorata, 2007; Dumais, 2002; Feagin et al., 1996; Alliance for Excellent Education, 2008; JBHE, 1999; Cantrell, 1999). In contrast to the literature, students in this study reported being very motivated to attend college. Achievement ideology was high too; respondents reported having high goals of earning a bachelor's or graduate level degree, and the goals were universal, even among respondents who did not attend college. The desire for social and economic mobility was apparent in the reasons why respondents wanted a college education. Getting a good job was the most common reason. Other reasons frequently mentioned by respondents were (a) to have a better life than my parents had, (b) to be exposed to new things and new experiences, (c) to challenge myself, and (d) to make a lot of money. Even though respondents had high educational goals, the goals were recent; in most cases, the students did not formulate those goals until high school. Planning early for college can help students to prepare adequately for college.

In addition to personal motivation, parents' social capital (measured in part by marital status and relationships with others that are focused on students' educational

goals) and cultural capital (measured by educational attainment, occupation, and appreciation and possession of things valued by the dominant class) have been found to play a role in their children's college attendance and educational attainment (Dumais, 2002; Swartz, 1997; Bourdieu, 1986; Yan, 1999; Portes and Wilson, 1976). This section discusses three important connections between parents and children regarding educational goals. First, the literature suggested that children of single parents were likely to have lower levels of social capital (which aid educational attainment) compared to students who lived with both parents, because single parents were limited in the amount of time they had available to strengthen social capital through parent-teen and parent-school interactions. The current study found a direct relationship between living with both parents and college attendance. Students who lived with both parents were more likely to attend college, and to attend four-year colleges. In addition, a greater percentage of respondents attending four-year college lived with both parents, compared to respondents attending community college and respondents not attending college. Although these findings suggest a relationship between parents' marital status and college attendance, causality is not stated or implied. The range of reasons why this is the case should continue to be explored.

Second, the literature found that children whose parents had college degrees were themselves likely to earn a college degree. Almost all participants in this sample, however, were enrolled in college, despite the fact that their parents did not have college degrees. Only six percent of parents had a bachelor's degree, and nearly one

third of parents did not finish high school (many did not even attend high school). Since most respondents (regardless of college type) had parents without college degrees, there were no significant differences found in parental education by type of college attended. Social networks and peer influence between students, however, can explain the high college attendance rate of both the sample and case study populations.

Third, the majority of parents in this survey did not attend college; they reportedly had limited levels of cultural capital. Strong cultural capital would have provided parents with the knowledge needed to navigate the college application, admission, enrollment, and funding processes necessary for college attendance and educational attainment. Without strong cultural capital, parents were unable to dispense such college knowledge to their children. Subsequently, as is explained in the following section, respondents reportedly felt unprepared culturally to enter college.

Academic, Cultural, and Social Preparation to Attend College

Motivation and preparation, as discussed in chapter 2, are often related as barriers to college access for low-income minority students. The current study defined three additional types of preparedness for college, in addition to academic preparation: cultural preparation, social preparation, and financial preparation. (Financial preparation is discussed in the following section on tuition costs and funding.) The main research question centered on the importance of academic, social, and cultural preparation in the college attendance decision for low-income minority students. This study found that all three forms of preparation were important to the college attendance

decision. This research measured ACT and SAT scores and perceived academic preparation as separate measures, and found inconsistency between the two. For example, SAT scores were significantly higher for four-year college students than for community college students, and students who scored highest were most likely to attend four-year colleges. Although the scores were significantly different, there was no difference in students' perceived academic preparation for college by the type of college (4-year vs. 2-year) they ultimately chose. However, students who did not attend college generally reported feeling academically unprepared to attend college. Those who did attend college identified low SAT scores as a barrier (see barrier section). SAT/ACT scores were probably a better estimate of perceived academic competitiveness than was GPA.

Misalignment between stated perceived and test-measured academic preparation is most likely due to high grades earned in school that failed to correlate with high scores on standardized college entrance exams. Nonetheless, feeling academically prepared resulted in a 93 percent college attendance rate within the respondent sample. Perceived academic preparation was not statistically significant to the decision to attend college or the type of college attended, and was the least significant of all preparedness measures. However, the research found a statistically significant relationship between SAT/ACT scores and college attendance.

Although students reported feeling academically prepared to enter college, many of them reported feeling overwhelmed academically upon enrolling in college. They

reported being dissatisfied with the heavy workload of homework and exams, which they were not accustomed to undertaking. The misalignment between perceived and actual preparation might be explained by Kahlenberg (2006), who found that grades in low SES schools were not always indicative of academic preparedness, because an average grade of “A” in low SES schools yielded the same results on standardized tests as a grade of “C” in middle-class schools. This finding would imply that low SES school grades might be inflated, thereby overestimating students’ academic achievement, and giving students a false sense of academic preparation for college. Additionally, courses may be less rigorous in low SES schools. Analysis of student records found many instances in which program participants with A and B averages (at low SES schools) scored in the bottom fiftieth percentile on the SAT and ACT exams.

Cultural preparation related to students’ knowledge of college application, admission, enrollment, attendance, and funding processes. In this study, cultural preparation was the most significant preparation variable related to the type of college attended. Only 32 percent of respondents reportedly felt prepared culturally to enter college; respondents reportedly felt less prepared culturally than academically (55%) or socially (43%) to attend college. Even students who reportedly felt financially prepared to attend college said they felt uninformed about how to navigate college application, enrollment, and attendance processes. Students who reportedly felt culturally prepared for college, and reportedly did not face college planning barriers such as limitations in their knowledge of college admission processes, were more likely to enroll at four-year

colleges. The majority of respondents reportedly felt unprepared culturally to attend college. Parents' low levels of educational attainment are most likely the reason. If parents had attended and graduated college, they would have been knowledgeable about college application, enrollment, and funding processes that would aid their children's higher education decision-making. Throughout this study, however, respondents indicated that they were not prepared culturally to attend college and that limited knowledge about college admission and higher education choices was a barrier to their educational pursuits (see barrier section).

As the section on cost and funding will demonstrate, cultural components were rated more important than program funding. Almost half of respondents felt that cultural preparation was so essential to their college attendance decisions that they reportedly would not have attended college without the program components designed to familiarize students with the culture of college. In contrast, approximately 28 percent of respondents said they would not have attended college without program funding. More than money is required to promote college attendance for low-income minority students.

Less than half of students felt socially prepared to interact and communicate with faculty, staff, students, and others in the college community. This type of interaction is crucial to establishing social networks that could help students reach their goals of obtaining a college degree. Feeling socially unprepared was universal, such

that no group of students was significantly more likely than another group to report feeling socially prepared for college.

Tuition Costs and Funding

Funding and tuition costs were very important to the college decision; of the two, funding was most important. Housing costs and grants were the financial issues most significant to college type, and they were both considered more important to four-year college students than to two-year college students. Ironically, although much of the literature focuses on academic and financial barriers to college, students in this study reported feeling most prepared academically (55%) and financially (30%), and least prepared socially (43%) and culturally (21%). Respondents' rated scholarships as the most important financial variable; tuition was a close second. Loans were least often rated important. Guaranteed tuition seemingly alleviated some concern for tuition costs, and largely, the burden of student loans, which has traditionally limited college attendance for other low-income minority students. Respondents placed equal importance on scholarships and loans, with no significant differences by college type. Although 93 percent of respondents attended college, many felt unprepared in any way; this could signal potential future barriers to college retention and educational attainment, issues that are beyond the immediate scope of this research.

Almost all respondents believed that funding was very important, and approximately 27 percent speculated that they would not have attended college without program funding. Without program funding, respondents said they would have most

likely increased their borrowing for college. Although one third of college students said they would not have attended college without program funding, one-half of students said they would not have attended without the program's college planning assistance. Funding is very important, but not the most important consideration in the college attendance decision. The fact that over 60 percent thought they would still attend college without the funding illustrates that money was not thought to be the most important consideration for low-income minority students seeking a college education.

The Influence of College Characteristics, College Academics and Majors, College Recruitment, and Advice Received

Knowing the factors related to college characteristics, college academics and majors, college recruitment, and advice received can deepen our understanding of how low-income minorities make college attendance decisions. Students at four-year colleges were significantly more likely to say that appearance of campus and campus housing (expected) were important. Other variables were not significant to college type, but were very important to the college admission decision. Distance from home was important, especially to community college students, who are most likely to live at home while attending college. Average class size was also important, especially to four-year students. Factors that differentiate one college from another were significantly more important to four-year students, namely the availability desired of college major, and housing, and the appearance of campus. However, whether the college offered students' desired college major was said to be important to all respondents.

College characteristics, as a category, were more important than *college academics and majors* or *college recruitment* variables. Regarding college academics and majors, only the SAT/ACT requirements variable was significant to college type. Community college students (who had the lowest SAT scores) were more likely than four-year students to place importance on SAT and ACT requirements. This consideration is most likely a reflection of community college students adjusting their college choices to match their low SAT scores, which they believed was an academic barrier to college attendance (described in barriers sections).

College recruitment variables that fostered human interaction were rated most important by all college attendees. The most important college recruitment variables were reportedly college fairs, college representative visits to the high school, and college campus visits. College fairs and campus visits were most important to two-year students. In contrast, college brochures and websites were the least important recruitment variables.

Program advisors were named as the most widely used information source, and the most important information source, followed by parents and family. Interestingly, the ratings that respondents gave to teachers and counselors as important information sources were similar to the importance ratings they gave for non-human information sources, and those with one-way communication driven by the student. In a separate item, respondents rated the importance of the advice they received; the most important advice received was reportedly from program advisors, family, and high school

counselors. Community college students were significantly more likely to receive advice from family; four-year students were significantly more likely to receive advice from high school counselors.

Perceived Barriers to College Access

Although many respondents reported that they did not face barriers that limited their higher education choices, some respondents reported the academic, financial (see cost and funding section), college preparation, and personal factors that restricted, affected, and influenced their higher education decisions. Low SAT/ACT score was the most frequently stated academic barrier, and was most pervasive with community college students; this was probably because they made an effort to select a college into which they could be admitted with their low-perceived scores. The majority of students did not report facing academic barriers, which is consistent with the general feeling of being academically prepared to enter college. Low SAT/ACT scores were found to be one reason why low-income minority students in this study attended community college more often than four-year colleges and universities.

College preparation barriers were faced more often than were academic barriers. Limited knowledge of education options and college admission processes was the most common college preparation barrier; this barrier was a limitation of the students themselves, and of their families, which had limited abilities to assist respondents in college planning. Consistent with that finding, college preparation barriers were the most significant to college type. [Refer to the discussion on bridging (social) capital

and cultural capital.] The most pervasive personal limitation to college options considered were a desire to stay close to home (2-year students) and a responsibility to provide for parents and family. These factors may have limited the options considered to those that were close to home. The respondents who expressed a need to provide for their parents and family might have been less likely to enroll full-time, or to have adequate time to commit to studies because of their jobs. Personal barriers were by far the most universally recognized type of barriers, and were the least significant to the type of college attended.

As stated previously, a disproportionate number of low-income minorities in this study chose community colleges over four year colleges for a number of stated reasons. First, students with low SAT/ACT scores were most likely to attend community college over four-year colleges. Second, community college students also had the lowest levels of perceived cultural and financial preparation to enter college. Third, a desire to stay close to home seemingly limited the number and types of colleges they considered attending. Fourth, they had a more pervasive need to provide financially for parents and family. Finally, they were most likely to be raised by single parents.

Most students who chose a community college did so to complete their core courses (basics) in hopes of transferring to a university. Others said they wanted to try out college, a point that reflects a need for stronger academic and cultural preparation before enrolling at a four-year college. (Unfortunately, students who transfer are likely to take longer to graduate, and increased graduation time decreases the likelihood of

graduating.) In addition, by attending community college, students may not be immersed within the college culture as quickly or as deeply as if they have attended four-year colleges and universities at the onset.

Maslow's (1943) hierarchy of needs postulates that the most immediate and fundamental needs of a person (e.g., shelter, safety, and food) must be met before a person can strive to meet higher-level needs (e.g., self-actualization synonymous with obtaining a college degree). Many respondents in this current study communicated immediate needs, such as providing for their families and needing income. It appears as though, consistent with the literature, those needs took priority over the more long-term goal of educational attainment, and explained a financial reason why some respondents chose to attend community colleges over four-year universities, despite their stated goals of obtaining a bachelor's degree or higher. The following response from a community college student captures the economic need and responsibility to care for parents that limited some respondents' higher education choices.

My mother was at home struggling to pay the bills and get my little brother through school, so I decided to stay home for two years and help out, besides I can get all my basic classes out [of] the way.

Respondents who were attending four-year colleges used more positive tones when explaining why they chose to attend four-year colleges. Four of the most common reasons given for attending a four-year college were (a) the desired major was offered,

(b) a desire to reach educational goals, (c) the reputation of the college, and (d) to experience college life.

Satisfaction with Higher Education Decisions

In addition to the four research questions, this study explored satisfaction and dissatisfaction with the college decision once it was made, as an indicator of the likelihood to persist through (bachelor's) degree completion. Students were most satisfied with the actual decision to attend college because they are acquiring new knowledge, experiencing a new environment, and setting goals for themselves. A majority were satisfied with the college attended, although some reportedly satisfied students said they would switch colleges if they could. Students were reportedly least satisfied with their chosen academic major. Knowing how current college students feel about their previous college choices is meaningful for educators to share with prospective college students, to assist them in the matching process. Respondents were also dissatisfied with the heavy workload of academic assignments (readings; homework; class work; and exams). This finding contrasts with respondents' perceived academic preparedness to enter college; a slight majority of respondents indicated that they faced no academic limitations, and perceived that they were academically prepared to enter college. Although they initially felt academically prepared to enter college, they may now be feeling academically unprepared to succeed.

Implications for Policy

Academic, social, cultural, and financial preparation are central to low-income minority students' decisions about whether to attend college and the type of college to attend. Education policies should offer increased grant and scholarship support for college, and must include social and cultural components to bridge the cultural deficits of low-income minority students, who are not well informed in maneuvering the application, admission, and funding processes necessary to attend college. Any initiative or policy that has financial resources attached must focus also on social and cultural capital of the students. Without social and cultural capital, low-income minority students will still be unlikely to attend college (and to graduate).

Students who demonstrate high academic achievement and a desire to attend college should be steered into four-year colleges and universities whenever possible. Beginning at a four-year college, instead of "trying out college" (as some respondents said) at a community college, familiarizes students with the rigors of college at the onset, and immerses them in the college culture, thus improving graduation rates. Minimizing transfers also promotes continuity and thereby increases the likelihood of graduating from college. Low-income minority students who are academically prepared to enter four-year colleges and universities should be aided to do so. As the current study found, academically qualified, low-income minority students often attend community colleges instead of four-year colleges/universities because they do not feel financially, socially or culturally prepared to enter college, or to be successful therein.

Financial Preparation

Increasing funding for college attendance is an essential step toward realizing parity in higher education. A universal tuition forgiveness program should be implemented to increase college access, and improve college retention and educational attainment for low-income students. The best way to implement a comprehensive, standardized program is through the federal government, managed by the U.S. Department of Education. The proposed tuition forgiveness program would provide an established percentage of credit (or refund) for each semester in which students certified as low-income are enrolled full-time, with additional credits given for (a) enrolling in continuous long semesters (fall and spring) without interruption, (b) maintaining at least at 2.75 GPA, and (c) pursuing career tracks most needed to boost the U.S. economy. The national tuition credit program would promote student success by aligning student enrollment with college retention and college success indicators. Whether managed by the federal government or higher education institutions, the program would help to promote enrollment benchmarks and the academic standards that colleges promote, providing a mutual benefit to students, colleges, and the national economy. In addition to offering tuition credits, properly matching students with the appropriate financial resources is crucial to broaden the higher education considerations of academically prepared students. A lack of financial resources was found to be a barrier to college attendance for low-income and minority students who desired to attend college.

Social and Cultural Preparation

Students. African American and Latino students were found to have high educational and career goals, but they reach those goals at much lower rates than do their White counterparts. One theory is that these students have more abstract ideas of educational attainment and lack relevant examples of the benefits of educational attainment; therefore, they do not generally align their behaviors with those required to reach their stated educational goals. Over 94 percent of respondents in this study reportedly desired to obtain a college degree, yet more than 70 percent of them reported feeling unprepared socially and culturally to enter college. In addition to course content, enriching experiences that can connect current high school students with college campuses will strengthen the relevance and connectedness of their goals, and will therefore make their ideas of achievement more concrete.

One way to expose low-income minority students to real-life examples of college goers is by using current college attendees as mentors for high school students. Mentors from the same high school can help students plan for college and can give advice on what is important when selecting a college. This program is envisioned as a joint collaboration between the college and the high school, which would communicate to students and school administrators the notion that high school and college are connected in the P-16 continuum that should provide a smooth and successful transition for students. Mentoring high school students would promote the retention of the college mentors, by guiding others to discover the tools that will aid their success. Colleges

should provide service-learning credit for the mentors, and high schools should provide social studies, general elective, career planning, or vocational credit for participating students.

Another reason to facilitate interaction between high school students and college goers is that through immersion, high school students will increase their familiarity with the culture of college, and begin to adopt the values and norms of the dominant class, from which many of these students are often segregated. Facilitating interaction between students and the college community will promote meaningful communication and interaction to strengthen students' social capital.

Parents. Parents should be included in college visit and college planning activities to strengthen their college knowledge, and learn about college culture, requirements (e.g., academic and financial), in order to have realistic expectations. The overwhelming majority of parents in this study were not college educated, and had low levels of dominant cultural capital, lacking the knowledge about college preparation that their students were trying to acquire. The limited ability of parents to help their children reach their goals signified diminished parent-teen social capital transmission. Therefore, to promote parent-teen, parent-school, and parent-parent interactions for social capital development, parents must learn enough about college to understand their student's goals, and to work with schools and universities to assist their students in reaching their goals.

Community organizations and not-for-profit agencies must engage parents in cultural and educational field trips and training programs focused on higher education. Because low-income minority students' parents generally have low levels of dominant cultural capital, interaction between low-income parents, community leaders, and school administrators must help parents to build bridging capital. Bridging capital is needed to connect low-income families with community resources and other people who can assist them as they navigate within the school and college communities. Respondents in this survey felt that their higher education choices were limited by insufficient knowledge about college options; moreover, they felt that their parents' limited knowledge about college admission processes further restricted their higher education decisions. Parents must receive training to advocate on their students' behalves, and to change their family norms by expecting academic excellence and college attendance, thus strengthening parent-teen forms of social capital. If parents acquire this knowledge, they will be better able to help their students to attend college. Getting a college education can improve the social and economic mobility of the students. It can also indirectly improve the lives of their families because the college-educated students can better support their families financially than without such an education.

Academic Preparation

To reduce academic deficits, policy must be implemented to provide enrichment opportunities to level the playing field for students who are suffering from knowledge

mismatch and academic deficits. Such support should be in the form of summer enrichment academies, extended day programs, or weekend programs to provide student-centered learning in core academic areas as well as standardized testing. The enrichment academies must be implemented in Title I (low SES) schools, which educate the majority of low-income and minority public school students in US. Offering supplemental workshops focused on standardized tests would provide tremendous support for African American and Latino students who historically have the lowest mean SAT and ACT scores of all races/ethnicities nationwide. Low standardized test scores act as gatekeepers to college in general, and to four-year colleges specifically. SAT and ACT preparation workshops would familiarize students with the content, language, structure, and mental demands of the exams, as well as strategies to improve performance. Such knowledge would provide low-income minority students a fairer chance to compete against other students for competitive college admission. Test preparation would also help students to be realistic about their academic preparation for better college matching.

As a precursor to standardized testing however, a concerted effort must be made to enroll low-income students in college preparatory curricula before entering high school. Not taking, and having limited access to advanced level and honors courses were presented in the literature as two additional barriers (via SAT/ACT) to college access for low-income minority students, as was limited knowledge about college planning processes. As Cammorata (2007) found, low-income minority students are no

less capable than other students are to handle academic challenges; they just need proper guidance and high relevancy to their everyday lives.

Some literature suggests that students have decided by grade 10 whether they will attend college, and most at that point expect to attend (Ingels et al., 2005). Therefore, high school curriculum planning must begin during the middle school years. Early formation of goals allows time for necessary behavior alignment for goal achievement. If a student does not formulate higher education goals until late in high school, and does not take the necessary advanced and honors level courses to prepare for college, the high school years could be too late to remedy the cumulative gaps in instruction and learning. Steering low-income minority students into advanced and honors courses will familiarize them with the challenging content tested by SAT/ACT and will promote academic preparation for college. Tracking students early will also promote the importance of planning to obtain long-term goals.

Other ways to help students to understand the academic requirements of college, are through college course auditing, dual credit enrollment (I.e. taking college-level courses for credit in high school and college, while in high school), and international baccalaureate academic programs. All of these programs would give low-income minority students an early indication of the rigorous academics of college so they know the academic requirements at the onset. Knowing the academic requirements for college admission and college graduation can help students prepare to meet those expectations, while still in high school.

Relationship Building

Relationships and human interaction were very important to the respondents in this study. School districts, because of funding issues, are reducing the sizes of their counseling staff, which increases the student caseload per counselor. Further, the counselors who remain at the schools have other duties in addition to counseling. For low SES schools in particular, it is critical to have counselors who are dedicated to college advisement, relieved of other duties; this is necessary in order to educate students and parents on their college options and higher education requirements and expectations, over four years in high school. In this manner, parents can better advise their students as well. (Parent advice was very important to respondents in this study.) Program advisors were widely used, and reportedly very important to respondents; even with a staff of only two advisors with combined case loads of 400-500 students per school, by focusing on college planning full-time, program advisors were still able to provide individual assistance to students. In short, human interaction is critical.

Human interaction was important in college recruitment as well. Consistent with previous research, minority students preferred active (vs. passive) recruitment methods that engaged the college staff with students face-to-face. They also preferred the college recruitment variables and methods that involved human contact (e.g., campus visits, college fairs, and college recruiters visiting their campus) to those that did not (e.g., brochures and websites). College admission staff should establish an ongoing presence on high school campuses, to manage relationships with students and

staff, and educate students about admission requirements while steering them toward scholarship opportunities. Additionally, inviting high school students to college campuses for special programming with extended immersion (such as a weeklong academy) or special prospective or other student programs would increase academic success of the students in high school and college.

Properly matching students to colleges, as stated previously, is critical for promoting enrollment at four-year colleges/universities; it is also important to promote the satisfaction of the student long-term, and the student's likelihood of persisting to graduation. There are many on-line tools available to match students' variables; variables include (a) academic achievement, (b) standardized test scores, (c) academic majors desired, (d) educational goals, (e) desired location, and (f) college cost, to help a student find a college that is an ideal fit. Students in the survey, even those who said they were satisfied with their current college choice overall, indicated that they would transfer colleges if they could, due to some level of dissatisfaction with the current college choice. Switching colleges often causes students to lose the transferability of credits for courses taken, however, which can increase the time necessary to earn a college degree. As we know, the longer a student takes to complete a college degree, the less likely the student is to earn a degree. Some survey participants were dissatisfied with the college they chose to attend; others were dissatisfied with their college majors. By sharing their experiences of satisfaction and dissatisfaction, college attendees (in addition to profile matching) can assist with the college matching process.

Assumptions and Limitations

The researcher made some assumptions regarding this study. First, the researcher assumed that the experiences of low-income students in low SES, central city public schools are similar to those of minority students in similar schools across the nation. Second, the researcher assumed that the overall current socioeconomic status of low-income minorities was a disadvantage for the minorities in the U.S. population. Third, the researcher assumed that earning a college education would provide the best opportunity to improve the socioeconomic status of low-income and minority students, and assumed this goal was shared by the respondents (later supported through research findings), or should be shared by respondents. The researcher also assumed that attending a four-year college/university, at the onset, would give students the best opportunity to reach their goals of earning a bachelor's degree or higher, especially since tuition was guaranteed. Therefore, much of the research was focused on providing opportunities for academically qualified students to attend four-year universities, and on preparing other students to become academically qualified for such opportunities directly from high school.

Another limitation was the sample size, which was 37 percent of the described targeted population. The small sample size (N=70) limited the analyses that could be performed between independent variables, such as comparisons by high school attended, race/ethnicity, and gender. Other analyses, such as between those who attended college and those who did not, were not as meaningful as they could have been

if more non-attendees had participated in the survey. Offering a financial incentive to the students who responded likely helped to increase the sample size; however, it may have diminished the integrity of responses. In other words, some students may have just rushed through the survey, without thoughtfulness to their answers, to earn the \$25 gift card. A couple of respondents completed the survey multiple times; they were counted only once in the results. It is interesting, though, that some such students did not match their responses on all versions of the completed questionnaire. The researcher chose to keep the first completed questionnaire and to discard subsequent versions because the researcher believed that the first response was probably the most accurate and honest. The subsequent responses may have been an attempt to earn more gift cards, but the researcher cannot be sure of the reasons. In addition, because there were only 70 respondents, and all of them were involved in a not-for-profit college readiness and college access program that guaranteed tuition funding, the findings may not be generalizable to the entire U.S. population of low-income minority students. However, the insight that this study provides is valuable for furthering analysis and dialogue.

Survey research, although it has many positive qualities, such as increasing the possible reach, reducing active researcher influence, and providing anonymity, is also limited. Two major limitations of survey method are the potential for misinterpretation and the lack of clarification possibilities (Babbie, 2001). The researcher cannot be sure that the questions, as asked, had the same meaning for the respondents as for the

researcher. For example, one item asked respondents if they knew someone who attended college, and if so, who. Several respondents selected “yes,” and then later after being provided a list of possible people (such as parents, friends, neighbors) and an “other” box for write-ins, wrote in “no one.” The respondents either knew someone who was not on that list and did not see the “other” box, or incorrectly answered the first item. In these cases, the researcher assumed that the first responses should have been “no”. Another respondent, on the same question, selected “other” and wrote in that her boyfriend attended college; this response was recoded as “friend”.

Respondents may have felt guided in their responses by knowing that the research was conducted by someone who has a close relationship with the program. For example, in asking which information sources they utilized, respondents almost unanimously selected program advisors. It is the mission of program advisors to meet regularly with all students in their caseload; however, because of the large caseloads, this may not have been the case. Nonetheless, almost 90 percent of respondents said that it was.

Recommendations for Future Studies

This study presented a snapshot of students who graduated from high school and were involved in a not-for-profit college access program. This research was valuable because it provided insight into the higher education decisions of low-income minority students, and how program provided funding and guidance may have mitigated barriers

and influenced those decisions. To further the study of the variables and barriers related to college access, the researcher makes five recommendations for future study.

First, longitudinal surveys should be conducted with a cohort of high school students (beginning in grade 9) each year. It would be valuable to see how students' educational goals change over time, and to align those changes with student records and student responses to see how the two align. Such analysis could promote intervention, when necessary, to prepare students for college. Providing college access is critical; this type of study would allow educators to intervene as necessary to provide access to the greatest number of students possible, and to identify the barriers that threaten that attainment.

Second, longitudinal surveys of a cohort of high school graduates who attended college should be conducted over six years. The study could include Clearinghouse™ student record and tracking data, in addition to participant responses, to gauge the likelihood of students persisting to completion of a bachelor's degree (or higher). This research should also analyze course selection, with particular emphasis on developmental courses taken. (This item should also be included in the fifth future study recommendation.) In addition, such tracking would allow analysis of the reasons why some students complete college and why others do not. For this study, an entire school district within a large urban city should be included. Promoting access to college is critical. Understanding the variables that promote college success is equally important.

Third, conducting a study similar to the present study, which compares first year college students in a middle-class school, without a college access organization like *the program*, would provide meaningful analysis of the variables that are most related to the SES of the school and those related to students or inadequacies of education in general. Such a study would allow educators to evaluate the strength of the program in terms of its ability to strengthen capital for low-income minority students, in comparison to middle-class students' capital levels. Beneficial, too, would be a study similar to the present study conducted with high school graduates (within a year after of graduation) from the same school district (or within the same school) that was diverse racially/ethnically and economically. The study should compare responses of low-income students to those of middle- and high-income students within the same race, to try to isolate the variables related to race and income. Comparing responses of students, who are of the same income level, but of different races, and cross-referencing the findings with those of the aforementioned sample dissection, would strengthen comparison and isolation of the relationships between independent variables and the dependent variable of college attendance.

Fourth, a study of the college attendance goals and follow-up study should be conducted between different schools with similar demographics, in which one has a college access program and one does not. The research should focus on the effect of the college access program on the school and program participants. The study would also serve as a program evaluation.

Finally, a follow-up survey each year for the next six years should be conducted with two components of analyses. First, a case study with the same students from this present case study should be conducted. Each year, as students matriculate (or not), the survey would give insight into the key variables that might have changed for the respondents. One of the variables that might have changed is educational status (e.g., enrolled/not enrolled/graduated; 4-year or 2-year college; full-time or part-time). Perceived academic, cultural, social, and financial preparedness to graduate college may have changed as well. Social and cultural capital development should be tracked over time, also. Changing motivation and goals should be researched, as well as changes in perceived barriers. In addition, satisfaction and dissatisfaction with higher education choices should be explored as it evolves over time, and may provide insight into the likelihood of college students persisting to college graduation.

The second layer of analysis should attempt to reach all 189 students in the described population for this survey. The expanded research would include the same variables as the current survey, and the proposed survey above, but would provide greater insight into the variables that are most significant for college graduation. Both phases of this proposed research should include, in addition to questionnaires, focus groups, in-person interviews, and written and multimedia ethnographies when possible. Another benefit of this research design is that including insight from a larger sample would allow testing of the internal validity of the current survey.

This research study was intended to understand (a) how low-income minority students made their college attendance decisions, and (b) the perceived barriers that limited their choices for higher education. The current study furthered dialogue with low-income students about their educational goals and the resources that were available (and those that were still necessary) to help them reach their goals. Understanding how low-income minority students make their college attendance decisions can help educators to provide meaningful, timely, and accurate information in the media (e.g., organizational web pages, social networking websites, campus visits, and college brochures) in which students are most likely to receive it. Understanding the barriers these students faced (and have overcome) can allow educators to mitigate those barriers over which they can have some control. Increasing access to higher education for underserved populations can also increase subsequent educational attainment for these populations. Increasing both will promote equity in higher education, and hopefully equitable access to the distribution of benefits associated with it. The words of George Washington Carver should remind us, “Education is the key to unlock the golden door of freedom.”

APPENDIX A

SURVEY I – FOR RESPONDENTS WHO ARE
CURRENTLY ATTENDING COLLEGE

Your Higher Education Choices - Currently Attending College

1. Educational Experiences

Dear Program Scholar,

It seems like just yesterday you were registering for SAT/ACT tests, signing yearbooks, and preparing to graduate high school. What a difference a day makes! At the dawn of a new year, it is a good time to pause and reflect on your recent experiences preparing for life after high school. The Program is committed to your ongoing success, and we would like to know about your higher education plans and goals. Please complete this quick survey to share with us. Your participation is voluntary; your choice to participate will not affect your status as a Program scholar. Please check the box below to indicate your willingness to participate in this survey. Best wishes!

Thank you for participating in this survey. Your responses will help us understand the choices you made regarding education after high school. Survey sections focus on (a) educational experiences, (b) factors of influence, (c) decision-making, (d) satisfaction with your higher education decision, and (e) recommendations to improve the program for future students like you!

1. I agree to participate in this survey regarding my education plans, experiences, and goals. I understand that my responses will remain confidential, and will not be shared with others. I further understand that my participation in this survey is voluntary. My status as an ABC scholar will not be affected by my decision to (or not to) participate in this survey. Completing the questionnaire has minimal if any risks, and requires approximately 10 minutes to complete. If I choose to complete the survey, I will receive a \$25.00 Wal-Mart gift card from ABC, in appreciation for my time and genuine insight. Finally, I may quit the research at any time, and will still receive the Wal-Mart gift card, even if I must stop the research for any reason.

Yes

No

2. What is your current educational status?

Attending a 4-year college/university

Attending a 2-year/community college

Not attending college. If not currently attending college, please do not complete the rest of this survey. Instead, complete the survey for students who are not currently enrolled in college.

Other (please specify)

3. Why did you choose to attend the type of college indicated in question 1?

4. How many semester credit hours are you taking right now?

Semester Credit Hours

Fall Hours Enrolled

Copy of Your Higher Education Choices - Currently Attending College

5. What is your ultimate educational goal?

- To obtain a graduate degree (master's/doctorate, Law degree, Medical Doctor)
- To obtain a bachelor's degree
- To obtain an associate's degree
- To obtain a training certificate

6. Why did you desire a college education? (Check all that apply.)

- To have nice things
 - To have a better life than my parents had
 - To become smarter
 - To get respect
 - To challenge myself
 - Other (please specify)
-
- To get a good job
 - To make a lot of money
 - To be exposed to new things and new experiences
 - To meet my family's expectations
 - To experience "college life"

7. What is the highest education level of your parent(s)?

	Elementary school	Middle school	High school	Some college	Associate's (2-year) degree	Bachelor's (4-year) degree	Master's Degree	Doctoral Degree	Unknown
Mother	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				
Father	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				

8. Do you know people in your community who attended college?

- Yes
- No

9. Who in your community attended college?

- Grandparents
- Other family members
- Friends
- Brothers/sisters
- Parents
- Other (please specify)

Copy of Your Higher Education Choices - Currently Attending College

2. Factors of Influence

There are many factors that influence students' higher education decisions. In this section, please reflect on those factors that helped you to make your decision about college, including the decision to attend college.

1. Of the many possible sources of information, please select three (3) that were MOST IMPORTANT to you in making your college attendance decision.

- | | | |
|--|---|---|
| <input type="checkbox"/> Apply Texas | <input type="checkbox"/> College website | <input type="checkbox"/> Mentor |
| <input type="checkbox"/> College Board | <input type="checkbox"/> Program advisor | <input type="checkbox"/> Parent/family |
| <input type="checkbox"/> College brochures | <input type="checkbox"/> Friend | <input type="checkbox"/> Princeton Review |
| <input type="checkbox"/> College campus visit | <input type="checkbox"/> Guidance counselor | <input type="checkbox"/> Teacher |
| <input type="checkbox"/> College fair | <input type="checkbox"/> Internet search engine | <input type="checkbox"/> Television |
| <input type="checkbox"/> College rep. at high school | <input type="checkbox"/> Internship manager | <input type="checkbox"/> U.S. News and World Report |
| <input type="checkbox"/> Other (please specify) | | |

2. Rank, in order of importance, the following FINANCIAL factors that influenced your college attendance decision? (Check all that apply.)

1 is MOST IMPORTANT

7 is LEAST IMPORTANT

	1	2	3	4	5	6	7
Book/supply cost	<input type="radio"/>						
Campus housing cost	<input type="radio"/>						
Grant needs	<input type="radio"/>						
Income needs	<input type="radio"/>						
Loan needs	<input type="radio"/>						
Technology cost	<input type="radio"/>						
Tuition cost	<input type="radio"/>						

Other (please specify)

Copy of Your Higher Education Choices - Currently Attending College

3. Which ACADEMIC factors, if any, may have restricted your college attendance decision? (Check all that apply.)

- Insufficient credits in core academic subjects (such as math, English, etc.)
- Low high school GPA
- Low SAT/ACT score
- Low TAKS score
- None of the above
- Other (please specify)

4. Which COLLEGE PREPARATION factors, if any, affected your higher education decision? (Check all that apply.)

- Lack of family knowledge of college or admission processes
- Poor guidance through the college admission process
- Little personal knowledge of various education options
- None of the above
- Inadequate college planning and preparation
- Other (please specify)

5. Which PERSONAL factors, if any, influenced your higher education decisions? (Check all that apply.)

- Family/parent(s) wanted me to stay close to home
- Family/parent(s) did not want me to attend college
- I wanted to stay close to home
- Responsibility to help parents/family
- I did not want to attend college
- Responsibility to raise child(ren) of my own
- I wanted to work full-time
- None of the above
- Other (please specify)

Copy of Your Higher Education Choices - Currently Attending College

3. Decision-Making

Think back on the information and sources you used to make your higher education decisions. Perhaps you, like other students, based your decisions on a combination of factors. As you recall how you made your higher education decisions, please evaluate the importance you placed on each factor. The following questions focus on academic, social, financial, and admission-related factors that affected your higher education decisions.

1. Which of the following INFORMATION RESOURCES did you use to make your college attendance decision? (Check all that apply.)

- | | | |
|--|---|---|
| <input type="checkbox"/> ApplyTexas | <input type="checkbox"/> College website | <input type="checkbox"/> Mentor |
| <input type="checkbox"/> College Board | <input type="checkbox"/> Program advisor | <input type="checkbox"/> Parents/family |
| <input type="checkbox"/> College brochures | <input type="checkbox"/> Friend | <input type="checkbox"/> Princeton Review |
| <input type="checkbox"/> College campus visit | <input type="checkbox"/> Guidance counselor | <input type="checkbox"/> Teacher |
| <input type="checkbox"/> College fair | <input type="checkbox"/> Internet search engine | <input type="checkbox"/> Television |
| <input type="checkbox"/> College rep. at high school | <input type="checkbox"/> Internship manager | <input type="checkbox"/> U.S. News and World Report |
| <input type="checkbox"/> Other (please specify) | | |

2. How important were these GENERAL COLLEGE factors to your decision about higher education?

	Not important	Somewhat important	Very important
Appearance of the campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Average class size	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Campus close to home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Campus far from home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Campus housing availability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ethnic diversity of staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ethnic diversity of students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of students enrolled	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical size of campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Did you have an adult who acted as your mentor?

- Yes
- No

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4. How important were these RELATIONSHIP factors to your decision about higher education?

	Not important	Somewhat important	Very important	N/A
Church leader advice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program advisor advice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employer advice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Family advice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friend advice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High school counselor advice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mentor advice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. How important were these ACADEMIC factors to your decision about higher education?

	Not important	Somewhat important	Very important
Assistance for undecided majors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College major offered	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
GPA requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ranking of academic major	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ranking of college/university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SAT/ACT requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. How important were these FINANCIAL factors to your decision about higher education?

	Not important	Somewhat important	Very important
Grants (need-based)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Housing cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scholarships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student loans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tuition cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Work-study program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. How important were these COLLEGE ADMISSION factors to your decision about higher education?

	Not important	Somewhat important	Very important
College brochures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College campus visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College fair	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College rep. at high school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Early admission decision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other websites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Copy of Your Higher Education Choices - Currently Attending College

4. Satisfaction

Now that you have made your higher education decisions, please reflect on how you feel about the choices you have made. This section helps identify areas of possible satisfaction or dissatisfaction with those decisions, and explores ways in which you might have changed those decisions.

**1. How satisfied are you with the decisions you have made regarding the following?
Rate from 1 to 5, using the drop-down menu.**

	Satisfaction
The college/university attended	<input type="text"/>
The academic major selected	<input type="text"/>
The decision to attend college	<input type="text"/>

2. In what ways are you SATISFIED with your higher education decisions?

- a.
- b.
- c.

3. In what ways are you DISSATISFIED with your higher education decisions?

- a.
- b.
- c.

4. If you could have chosen again, would you have chosen to NOT attend college?

- Yes
- No

5. If you could have chosen again, would you have chosen a different college?

- No
- Yes

6. Why or why not? (Refer to question 5.)

7. Was your current college your first choice when you graduated from high school?

- No
- Yes

8. If not, what college would have been your first choice?

Copy of Your Higher Education Choices - Currently Attending College

5. Preparation and Recommendations

In hindsight, how prepared did you feel for college? Please share your perception of your financial, social, and academic preparation to enter and graduate college.

1. At what point in your education did you begin to consider whether you would attend college?

- Elementary school (grades K - 5)
- Middle school (grades 6-8)
- High school (grades 9-12)

2. Do you feel like you were PREPARED TO ENTER COLLEGE? Use the drop-down menu to rate your preparation in each category.

	Preparation Rating
Academic (having the right classes and grades in high school)	<input type="text"/>
Cultural (knowing how to plan for college)	<input type="text"/>
Financial (having sufficient money for college)	<input type="text"/>
Social (ability and comfort interacting with faculty, students, and others at college)	<input type="text"/>

3. Do you feel like you were PREPARED TO GRADUATE FROM COLLEGE? Use the drop-down menu to rate your preparation in each category.

	Preparation Rating
Academic (having the right classes and grades in high school)	<input type="text"/>
Cultural (knowing how to plan for college)	<input type="text"/>
Financial (having sufficient money for college)	<input type="text"/>
Social (ability and comfort interacting with faculty, students, and others at college)	<input type="text"/>

4. Rate your level of personal motivation to attend college, using the drop-down menu.

5. Rate the importance of financial awards through ABC, to your college attendance decision. Use the drop-down menu.

6. Without Program funding, how likely would you have been to attend college?

- 1 Definitely Would Not Have Attended College
- 2 Probably Would Not Have Attended College
- 3 Might/Not Have Attended College
- 4 Probably Would Have Attended College
- 5 Definitely Would Have Attended College

Copy of Your Higher Education Choices - Currently Attending College

7. Without Program funding, how would your higher education plans have differed FINANCIALLY? (Check all that apply.)

- No change. I received full external funding through scholarships.
- Would have borrowed from family members
- Would have delayed college attendance
- Would have paid cash from my/family savings
- Other (please specify)
- Would have taken more parent loans
- Would have taken more student loans
- Would not have attended college

8. Without the availability of ABC funding, how would your higher education plans have differed STRUCTURALLY? (Check all that apply.)

- Would have attended a 2-yr. college vs. 4-year college
- Would have lived at home instead of campus housing
- Would have attended college closer to home
- Would not have attended college
- Would have attended college in-state vs. out-of-state
- Other (please specify)

9. Without college planning assistance, such as SAT/ACT registration, Life Skills training, and Advising, how likely would you have been to attend college?

- Definitely Would Not
- Probably Would Not Have Attended College
- Might/Not Have Attended College
- Probably Would Have Attended College
- Definitely Would Have Attended College

10. What recommendations do you have to improve ABC so that more students like you will successfully graduate high school and attend and graduate college?

11. What recommendations do you have for public high schools to improve student preparation for college?

Copy of Your Higher Education Choices - Currently Attending College

6. Demographic Information

Thank you! We appreciate your time and insight. Your responses will help us to make college a reality for more students like you! We are committed to your success. Please contact us if you need us by dialing XXX.XXX.XXXX.

In this final section, please share with us some information regarding your family (past and present), as well as your contact information.

1. What is your gender?

- Male
 Female

2. While growing up, who lived in the house with you at least most of the time? (Check all that apply.)

- | | | |
|--------------------------------------|--------------------------------------|---|
| <input type="checkbox"/> Mother | <input type="checkbox"/> Grandfather | <input type="checkbox"/> Brother(s) |
| <input type="checkbox"/> Father | <input type="checkbox"/> Aunt | <input type="checkbox"/> Friend(s) |
| <input type="checkbox"/> Stepmother | <input type="checkbox"/> Uncle | <input type="checkbox"/> My own child(ren) |
| <input type="checkbox"/> Stepfather | <input type="checkbox"/> Cousin(s) | <input type="checkbox"/> I lived by myself in high school/I was emancipated |
| <input type="checkbox"/> Grandmother | <input type="checkbox"/> Sister(s) | |

3. Do you have any children of your own?

- Yes
 No

4. Thank you for participating in this survey! We would like to send you a \$25.00 Wal-Mart gift card. Please provide your contact information so we may send your card!

First and Last Name:
College (if attending):
Street Address:
Apt./Room:
City:
State:
Zip:
High School:
E-mail:
Phone:

5. I agree to allow ABC to review my personal student records (SAT/ACT scores, etc.) for purposes of this research.

- Yes
 No

Your Higher Education Choices - Currently Attending College

7. Thank You!

Thank you for your time and attention to this survey. Best wishes from the Program Team!

APPENDIX B

SURVEY II – FOR RESPONDENTS WHO ARE
NOT CURRENTLY ATTENDING COLLEGE

Copy of Your Higher Education Choices - Not Currently Attending

1. Educational Experiences

Dear Program Scholar,

It seems like just yesterday you were registering for SAT/ACT tests, signing yearbooks, and preparing to graduate high school. What a difference a day makes! At the dawn of a new year, it is a good time to pause and reflect on your recent experiences preparing for life after high school. The Program is committed to your ongoing success, and we would like to know about your higher education plans and goals. Please complete this quick survey to share with us. Your participation is voluntary; your choice to participate will not affect your status with ABC. Please check the box below to indicate your willingness to participate in this survey. Best wishes!

Thank you for participating in this survey. Your responses will help us understand the choices you made regarding education after high school. Survey sections focus on (a) educational experiences, (b) factors of influence, (c) decision-making, (d) satisfaction with your higher education decision, and (e) recommendations to improve the program for future students like you!

1. I agree to participate in this survey regarding my education plans, experiences, and goals. I understand that my responses will remain confidential, and will not be shared with others. I further understand that my participation in this survey is voluntary. My status as an ABC scholar will not be affected by my decision to (or not to) participate in this survey. Completing the questionnaire has minimal if any risks, and requires approximately 10 minutes to complete. If I choose to complete the survey, I will receive a \$25.00 Wal-Mart gift card from ABC, in appreciation for my time and genuine insight. Finally, I may quit the research at any time, and will still receive the Wal-Mart gift card, even if I must stop the research for any reason.

- Yes
 No

2. Are you currently enrolled in college? If yes, please do not complete the rest of this survey. Complete the survey for current college students.

- Yes
 No

Other (please specify)

Copy of Your Higher Education Choices - Not Currently Attending

3. What are some reasons that you did not attend college? (Check all that apply.)

- | | |
|---|--|
| <input type="checkbox"/> Did not have enough money to attend | <input type="checkbox"/> Unprepared for the college admission process |
| <input type="checkbox"/> Needed to work a full-time job (40+ hrs./wk.) | <input type="checkbox"/> Did not meet college application deadlines |
| <input type="checkbox"/> Needed to work a part-time job (0-39 hrs./wk.) | <input type="checkbox"/> No desire to attend college |
| <input type="checkbox"/> Family did not support my desire to attend college | <input type="checkbox"/> Not academically prepared (grades, ACT/SAT, TAKS) to attend college |
| <input type="checkbox"/> Do not need college to reach my career goals | |
| <input type="checkbox"/> Other (please specify) | |

4. What is your ultimate educational goal?

- To obtain a graduate degree (master's/doctorate, Law degree, Medical Doctor)
- To obtain a bachelor's degree
- To obtain an associate's degree
- To obtain a training certificate
- My goal does not involve attending college.

5. Why might someone desire a college education? (Check all that apply.)

- | | |
|--|--|
| <input type="checkbox"/> To challenge themselves | <input type="checkbox"/> To get a good job |
| <input type="checkbox"/> To meet their family's expectations | <input type="checkbox"/> To become smarter |
| <input type="checkbox"/> To get respect | <input type="checkbox"/> To experience "college life" |
| <input type="checkbox"/> To have nice things | <input type="checkbox"/> To be exposed to new things and new experiences |
| <input type="checkbox"/> To make a lot of money | <input type="checkbox"/> To have a better life than their parents had |
| <input type="checkbox"/> Other (please specify) | |

6. What is the highest education level of your parent(s)?

	Elementary school	Middle school	High school	Some college	Associate's (2-year) degree	Bachelor's (4-year) degree	Master's Degree	Doctoral Degree	Unknown
Mother	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				
Father	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				

7. Do you know people in your community who attended college?

- no
- Yes

Copy of Your Higher Education Choices - Not Currently Attending

8. Who in your community attended college?

- Friends
- Brothers/sisters
- Parents
- Grandparents
- Other family members
- Other (please specify)

Copy of Your Higher Education Choices - Not Currently Attending

2. Factors of Influence

There are many factors that influence students' higher education decisions. Please reflect on those factors that helped you to make your decision to not attend college.

1. Of the many possible sources of information, please select three (3) that were MOST IMPORTANT to your higher education decisions.

- | | | |
|--|---|---|
| <input type="checkbox"/> Apply Texas | <input type="checkbox"/> College website | <input type="checkbox"/> Mentor |
| <input type="checkbox"/> College Board | <input type="checkbox"/> ABC advisor | <input type="checkbox"/> Parent/family |
| <input type="checkbox"/> College brochures | <input type="checkbox"/> Friend | <input type="checkbox"/> Princeton Review |
| <input type="checkbox"/> College campus visit | <input type="checkbox"/> Guidance counselor | <input type="checkbox"/> Teacher |
| <input type="checkbox"/> College fair | <input type="checkbox"/> Internet search engine | <input type="checkbox"/> Television |
| <input type="checkbox"/> College rep. at high school | <input type="checkbox"/> Internship manager | <input type="checkbox"/> U.S. News and World Report |
| <input type="checkbox"/> Other (please specify) | | |

2. Which ACADEMIC factors, if any, influenced your decision to not attend college? (Check all that apply.)

- Insufficient credits in core academic subjects (such as math, english, etc.)
- Low high school GPA
- Low SAT/ACT score
- Low TAKS score
- None of the above
- Other (please specify)

3. Which FINANCIAL factors, if any, influenced your decision to not attend college? (Check all that apply.)

- | | |
|---|--|
| <input type="checkbox"/> Book/supply cost | <input type="checkbox"/> Loan needs |
| <input type="checkbox"/> Campus housing cost | <input type="checkbox"/> None of the above |
| <input type="checkbox"/> Grant needs | <input type="checkbox"/> Technology cost |
| <input type="checkbox"/> Income needs | <input type="checkbox"/> Tuition cost |
| <input type="checkbox"/> Other (please specify) | |

Copy of Your Higher Education Choices - Not Currently Attending

4. Which COLLEGE PREPARATION factors, if any, influenced your decision to not attend college? (Check all that apply.)

- Lack of family knowledge of college or admission processes
- Poor guidance through the college admission process
- Little personal knowledge of various education options
- None of the above
- Inadequate college planning and preparation
- Other (please specify)

5. Which PERSONAL factors, if any, influenced your decision to not attend college? (Check all that apply.)

- Family/parent(s) wanted me to stay close to home
- Family/parent(s) did not want me to attend college
- I wanted to stay close to home
- Responsibility to help parents/family
- I did not want to attend college
- Responsibility to raise child(ren) of my own
- I wanted to work full-time
- None of the above
- Other (please specify)

Copy of Your Higher Education Choices - Not Currently Attending

3. Satisfaction

Now that you have made your higher education decisions, please reflect on how you feel about the choices you have made. This section helps identify areas of possible satisfaction or dissatisfaction with those decisions, and explores ways in which you might have changed those decisions.

1. In what ways are you SATISFIED with your higher education decisions?

- a. _____
- b. _____
- c. _____

2. In what ways are you DISSATISFIED with your higher education decisions?

- a. _____
- b. _____
- c. _____

3. If you could have chosen again, would you have chosen TO ATTEND college?

- Yes
- No

4. If so, which college would you have chosen to attend?

- 1st choice _____
- 2nd choice _____

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4. Preparation and Recommendations

In hindsight, how prepared did you feel for college? Please share your perception of your financial, social, and academic preparation to enter and graduate college.

1. At what point in your education did you begin to consider whether you would attend college?

- Elementary school (grades K - 5)
- Middle school (grades 6-8)
- High school (grades 9-12)

2. Do you feel like you were PREPARED TO ENTER COLLEGE? Use the drop-down menu to rate your preparation in each category.

	Preparation Rating
Academic (having the right classes and grades in high school)	<input type="text"/>
Cultural (knowing how to plan for college)	<input type="text"/>
Financial (having sufficient money for college)	<input type="text"/>
Social (ability and comfort interacting with faculty, students, and others at college)	<input type="text"/>

3. Do you feel like you were PREPARED TO GRADUATE FROM COLLEGE WITHIN FOUR YEARS? Use the drop-down menu to rate your preparation in each category.

	Preparation Rating
Academic (having the right classes and grades in high school)	<input type="text"/>
Cultural (knowing how to plan for college)	<input type="text"/>
Financial (having sufficient money for college)	<input type="text"/>
Social (ability and comfort interacting with faculty, students, and others at college)	<input type="text"/>

4. Rate your level of personal motivation to attend college, using the drop -down menu.

5. Rate the importance of financial awards through ABC, to your college attendance decision. Use the drop-down menu.

6. Do you plan to enroll in college in the future?

- Unsure
- Yes, during the 2008-2009 academic year
- Yes, during the 2009-2010 academic year
- Yes, after 2010
- No

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7. If you plan to attend college in the next year, please rate the importance of each of these factors to assisting you with reaching your higher education goal.

	Not Important	Somewhat Important	Very Important
Program Advisor Guidance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program College Planning Assistance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program Essay Writing Sessions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program FAFSA Workshops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program Funding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program Life Skills courses Attended	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program Sponsored College Visits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program Technology Package	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. What recommendations do you have to improve ABC so that more students like you will successfully graduate high school and attend and graduate college?

9. What recommendations do you have for public high schools to improve student preparation for college?

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5. Demographic Information

Thank you! We appreciate your time and insight. Your responses will help us to make college a reality for more students like you! We are committed to your success. Please contact us if you need us by dialing XXX.XXX.XXXX

In this final section, please share with us some information regarding your family (past and present), as well as your contact information.

1. What is your gender?

- Female
 Male

2. While growing up, who lived in the house with you at least most of the time? (Check all that apply.)

- | | | |
|--------------------------------------|--------------------------------------|---|
| <input type="checkbox"/> Mother | <input type="checkbox"/> Grandfather | <input type="checkbox"/> Brother(s) |
| <input type="checkbox"/> Father | <input type="checkbox"/> Aunt | <input type="checkbox"/> Friend(s) |
| <input type="checkbox"/> Stepmother | <input type="checkbox"/> Uncle | <input type="checkbox"/> My own child(ren) |
| <input type="checkbox"/> Stepfather | <input type="checkbox"/> Cousin(s) | <input type="checkbox"/> I lived by myself in high school/I was emancipated |
| <input type="checkbox"/> Grandmother | <input type="checkbox"/> Sister(s) | |

3. Do you have any children of your own?

- No
 Yes

4. Thank you for participating in this survey! We would like to send you a \$25.00 Wal-Mart gift card. Please provide your contact information so we may send your card!

First and Last Name:
College (if attending):
Street Address:
Apt./Room:
City:
State:
Zip:
High School:
E-mail:
Phone:

5. I agree to allow ABC to review my personal student records (SAT/ACT scores, etc.) for purposes of this research.

- Yes
 No

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6. Thank You!

Thank you for your time and attention to this survey. Best wishes from the Program Team!

APPENDIX C

E-MAIL INTRODUCTION OF THE SURVEY

Dear Program Student,

What an exciting time! Just a few months ago, you were completing your senior year of high school. At that time, you were probably trying to decide what to do after high school, deciding which college to attend, what major to study, and possibly what job to take. At this point, many of you have completed your first semester of college. Others have been gainfully employed or taken other avenues.

The Program Team would like to know how things are going for you. We have created a survey to allow you an opportunity to reflect on your higher education decisions, including deciding whether to attend college. Please take a few minutes and complete the survey. It is easy to do, and your opinions and insight are invaluable to us.

Our goal is to learn more about how you made your education decisions after high school graduation. Knowing this will give us some perspective to improve our program for future students like you! Your responses will remain confidential; we will summarize all responses, and will not identify you individually in any way.

If you have any questions, please contact Tiffany Gurley-Alloway, by e-mail or phone. Please complete the survey by 20 April 2009.

*** As a bonus, we will send you a \$25.00 Wal-Mart gift card for completing the survey by 20 April 2009. Thank you!
Click below for the link to your survey. Thanks again. ☺

Sincerely,
Your *Program* Team

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BIOGRAPHICAL INFORMATION

Dr. T. Gurley-Alloway began her career in the private sector, in marketing research management. After seeking an opportunity to apply her business acumen and knowledge of resource management (e.g., human, financial, technological, and other) to help others, God allowed her to earn an M.Ed. in higher education. T. Gurley-Alloway has spent the last 10 years in education, working in university business services, college admission, and as a certified math teacher in urban, Title I school districts. Tiffany is currently an education program director. She has conducted research on the following topics: (a) predicting student success on standardized tests, (b) education access and equity, (c) public school funding, (d) efficiency in college admission, and (e) effects of the Tiebout Model of local expenditures (and public choice theory) on education. Dr. T. Gurley-Alloway remains committed to changing lives through education! She is also committed to promoting equity through access and excellence in education!