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Making Cents Of It: How The Focus On Financial Aid By Selective Universities May Not Be Enough To Attract More Low-Income, High-Achieving Students

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MAKING CENTS OF IT: HOW THE FOCUS ON FINANCIAL AID BY SELECTIVE UNIVERSITIES MAY
NOT BE ENOUGH TO ATTRACT MORE LOW-INCOME, HIGH-ACHIEVING STUDENTS

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DEDICATION

To my parents, Michael and Frances Mothkovich

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While working on this project, so many people have helped me in countless ways. Truthfully, none of this would have been possible without the support and encouragement of so many. I would like to begin by thanking my dissertation committee members for all of their support and guidance over the past several years.

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Finally, I would like to thank the wonderful group of students who agreed to participate in this study. I could not have done this without you. Thank you for taking the time to share your experiences and valuable insights with me.

ABSTRACT

Most low-income, high-achieving students in the United States neither attend nor apply to selective universities despite research that shows that they are just as likely as their high-income peers to succeed if they do apply to those schools. Despite the fact that many universities have begun offering substantial financial aid packages that would often make it cheaper to attend a selective private university than a state school, low-income, high-achievers tend not to apply to selective universities. Researchers have carried out many quantitative studies testing possible variables that could influence these students' college application decisions. However, there has been a lack of qualitative research investigating low-income, high-achieving students' college application decisions. Therefore, using Hossler and Gallagher's model of college choice as a conceptual framework, this study used qualitative, phenomenological methods to interview 10 low-income, high-achieving students at selective universities to understand the variables that influenced their decisions to apply to selective universities, as well as their perception of the steps that selective universities took to recruit them. Results from the study suggest that many variables influence these students' college application decisions, including university reputation, personal connections to a university, and standardized test scores. However, students felt that selective universities did not actively try to recruit them in a personal manner, relying instead on mass mailings and high school visits from university representatives.

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CHAPTER 1

INTRODUCTION AND NATURE OF STUDY

In *The School and Society*, educational pioneer John Dewey (1900) said that “What the best and wisest parent wants for his own child, that must the community want for all of its children. Any other ideal for our schools is narrow and unlovely; acted upon, it destroys our democracy” (p.19). In his work, Dewey discussed the important role that schools could play as centers of social reform in society. If a society wanted to prosper, it needed to provide students with a high-quality education that would prepare them not only for specific occupations, but also to function in and contribute to a democratic society in many ways. According to Dewey, students should play a role in their own education and should be able to learn according to their ability, unhindered by external factors, such as socioeconomic status.

Are we as a society providing our students opportunities to reach their full potential? Are students being limited not by their ability but by their economic station in life? These questions led me to conduct a study on high-ability students and the important variables that influence some of their educational decisions. For this research study, I focused on low-income, high-achieving (LIHA) students at selective universities. For the purposes of this study, I defined LIHA students as students who were eligible for the Pell Grant, a Jack Kent Cooke Foundation scholarship, and admission to selective universities.

Selective universities refer to those universities ranked by *Barron's Profile of American Colleges* (2015) as *most competitive*, the top category of selectivity. Barron's ranks schools as *most competitive*, *highly competitive*, *very competitive*, *competitive*, *less competitive*, or *non-competitive*, based on factors including first year students' average GPA, high school class rank, standardized tests scores, and the percentage of applicants who are admitted.

Some of the schools in the *most competitive* category include renowned universities such as Duke, Emory, Harvard, Yale, Johns Hopkins, and Stanford. As a point of comparison, Clemson University is ranked as *highly competitive* and the University of South Carolina is ranked as *very competitive*.

According to the Institute for College Access and Success (2017), Pell Grants are awarded by the federal government to individuals demonstrating considerable financial need, with most recipients having a family income of less than \$40,000 per year (p.1). According to the National Center for Education Statistics, the median family income for Pell Grant recipients for the 2011-2012 academic year was \$26,100 (Ifill & Velez, 2016, p.2).

Finally, to receive a Jack Kent Cooke Foundation scholarship, students must be high-achieving, meaning they are recent high school graduates who have a cumulative GPA of 3.5 or higher and standardized test scores in the top 15% nationally (Jack Kent Cooke Foundation, "college scholarship program", n.d.). More information about participant and site selection for this study is included in Chapter 3.

Overview of LIHA Students in the United States

The unfortunate truth is that a majority of LIHA students in the United States do not attend any of the nation's most competitive universities (Hoxby & Avery, 2012; Hoxby & Turner, 2013; Klugman & Butler, n.d.; Soares, 2007; Wyner, Bridgeland, & DiIulio, n.d.). In fact, they do not even *apply* to those schools (Hoxby & Avery, 2012; Hoxby & Turner, 2013). This is despite the fact that these schools often cost them little or nothing due to substantial financial aid packages (Hoxby & Avery, 2012; Stanford University, 2013; Vedantam, 2013). This is also despite the fact that if these students do apply, they enroll and graduate at the same rates as their high-income, high-achieving peers (Hoxby & Avery, 2012).

These LIHA students could reap many benefits from attending a selective university. After all, previous research has shown that education is a reliable path out of poverty and a key to upward social mobility (Klugman & Butler, n.d.; Levine & Nidiffer, 1996). Recent research has also demonstrated that attending selective institutions comes with its own set of benefits, such as increased learning and a higher likelihood of degree completion (Carnevale & Rose, 2004). Similarly, LIHA students who graduate from a selective university are more likely to pursue graduate degrees and earn higher incomes (Giancola & Kahlenberg, 2016). However, in spite of generous financial aid, the ability of these students to perform well, and the many benefits of attending selective universities, the vast majority of LIHA students simply do not apply for admission.

In its research, the National Center for Children in Poverty found that the percentage of American children in low-income families (defined as families living at or under 200% of the Federal Poverty Threshold) has increased from 39% in 2008 to 44% in

2014 and that children are twice as likely as Americans 65 years and older to live in poor families (Jiang, Ekono, & Skinner, 2016). However, having at least 200% of the Federal Poverty Threshold is just a general measure and does not take into account differences based on geography. For example, in Boston in 2014 a family of four needed to earn around \$85,000 per year to meet basic needs (Jiang, Ekono, & Skinner, 2016) while the U.S. Department of Health and Human Services (2014) listed the poverty threshold for a similar household at \$23,850.

To get a better idea of the serious underrepresentation of LIHA students at selective institutions, consider the fact that these high-achieving students from the bottom SES quartile make up only three percent of enrollment at universities ranked as *most competitive* by Barron's, while students from the top economic quartile make up 72% of enrollment at those same institutions (Giancola & Kahlenberg, 2016). These data show that the overwhelming majority of students at the nation's most selective universities come from wealthy families. Unfortunately, an analysis of data from the U.S Department of Education shows that "the underrepresentation of lower-income students at highly selective colleges has not changed significantly in the past ten years" (Giancola & Kahlenberg, 2016, p.5), despite the fact that researchers estimate that each year "there are between 25,000 and 35,000 students who score in the top decile on the SAT or ACT and come from families in the bottom income quartile" (Giancola & Kahlenberg, 2016, p.7).

On the other hand, some LIHA students *do* apply to selective universities. Once there, the vast majority of these students thrive academically (Giancola & Kahlenberg, 2016; Hoxby & Avery 2012). Why do some of these students apply to selective universities when others do not? Are there common variables among LIHA students that

influence their decision to apply to selective schools? To date, researchers have been unable to reach a consensus. Until we understand why some of these students decide to apply to selective universities when so many of their peers do not, we may be unable to take purposeful action to increase the number of LIHA students at selective universities. This has major implications for these students and selective universities that try to recruit them.

The nation as a whole may also suffer when low income students, and LIHA students in particular, do not attend selective universities. After all, there are many social benefits to having a more educated citizenry. According to researchers, more education is correlated with: increased wages, meaning more tax revenue for states and the federal government and fewer demands for welfare assistance; increased civic and political engagement; less criminal activity; and better health (Mitra, 2011). Therefore, funneling students toward institutions that will offer them the best education and chance for graduation is also an investment that may deliver many benefits both to individuals and society as a whole.

While education brings many benefits for individuals and society, it is possible that students, including LIHA students, are unaware of the long-term benefits of higher education and do not see going to college as an investment but rather as a source of economic hardship. For these students, either being unaware of financial aid or having an aversion to debt may prevent them from attending college. In fact, research has found that among full-time students, those who are low-income are less likely to borrow money for college and when they do borrow, they take smaller loans (Burdman, 2005). Other research has found that students are less likely to take out loans for college if their parents

have had bad experiences with credit, if their parents are immigrants, or if the students are of Asian or Hispanic origin (Cunningham & Santiago, 2008).

Burdman (2005) also found that many high school guidance counselors generally do not discuss loan options, instead directing students to complete the Federal Application for Federal Student Aid (FAFSA). In a study of nine high schools in Los Angeles, three of the high schools had counselors who “were only able to answer the most basic questions about financial aid, and often they weren’t available even for that” (Burdman, 2005, p.13).

Purpose

The core purpose of this study was to learn about the factors that lead some LIHA students to apply for admission to selective universities. These students, being high achieving, perform at the top of their classes in high school and earn top scores on standardized tests (Hoxby & Avery 2012; Wyner, Bridgeland, & DiIulio, n.d.). Recent research has also shown that these students, if they do apply to selective schools, enroll and graduate at similar rates to their high-income peers (Hoxby & Avery 2012). Thus, there is no doubt about the academic ability of these students or their capacity to perform well at either a high school or university. The only discernable difference between the LIHA student who enrolls at a selective university and the LIHA student who does not is that the former *applies* to selective universities while the latter does not.

Research has also shown that the LIHA students who do apply to selective universities tend to mimic the application behavior of their high-income, high-achieving peers (Hoxby & Avery, 2012). This is what Hoxby and Avery (2012) refer to as “achievement-typical” application behavior (p.1). The LIHA students who do not apply

to selective universities tend to follow an application style that Hoxby and Avery refer to as “income-typical” (p1). That is, one group of LIHA students tends to apply to schools following a pattern that is comparable to students of similar *achievement levels*, while another group follows a pattern that is comparable to students of similar *incomes* but not similar achievement.

Previous attempts by researchers to understand why so many LIHA students do not apply to selective universities have yielded mixed results. Targeted studies attempting to increase the number of these students applying to selective universities have also had limited success. Therefore, the purpose of this study was to reach out to LIHA students and, through qualitative methods, gain an understanding of the variables that led them to apply to and subsequently enroll in selective universities.

Research Questions

The research questions guiding this study were:

1. “What variables do LIHA students identify as influential in their decision to apply to a selective university?”
2. “In the experiences of LIHA students, what steps, if any, did selective universities take to recruit these students to apply to their school?”

Previous research into the college application behavior of LIHA students has been unable to find a definitive answer as to why some of these students apply to selective universities when others do not. Attempts to increase the number of these students who apply to selective universities through various external methods such as increased financial aid, application fee waivers, and personalized college counseling have had little success. Furthermore, existing models of college choice do not offer much insight for

researchers into the college selection process of LIHA students but rather focus more generally on college students overall or on high-achieving students in particular.

Research Questions in Context of Existing College Choice Models

Many researchers in higher education have attempted to create models of college choice. These models study students' college choices to determine if there are variables that can consistently predict how, why, and when students decide to go to college and how students make their final choice about where to enroll. Existing models of college choice tend to view students' college selection as a multi-step process occurring sometime between grades 7 through 12 (Hossler, Braxton, & Coopersmith, 1989; Nora & Cabrera, 1992). One of the most well-known and often-cited models of the college selection process is the model created by Hossler and Gallagher (1987), which served as the framework for my study. The Hossler and Gallagher model describes the college selection process as a series of three phases including *pre-disposition*, *search*, and *choice*, with different variables influencing each phase.

According to the Hossler and Gallagher model, the *pre-disposition* phase is the first stage of the college choice process and is when students decide if they want to attend college. According to the model, many factors influence a student's decision whether or not to attend college, including the student's socioeconomic status, high school achievement levels, and levels of parental encouragement. Anderson, Bowman, and Tinto (1972) found that even living close to a college could influence a student's decision whether or not to attend college, with those students living close to a university being more likely to attend a university than those students who live further from a university. At the end of the first stage of the Hossler and Gallagher model, students generally fall

into three categories: those who always knew they would go to college, those who always knew they would not go to college, and those students who apply to a couple colleges but may never actually attend. Jackson (1978) referred to these students as the “Whiches”, “Nots”, or “Whethers” (p.571).

The second stage of the Hossler and Gallagher model, the *search* stage, is when students who have decided to pursue higher education begin to look for more information about different colleges. During this stage, students begin to examine different variables such as financial aid availability, tuition costs, and other institutional characteristics such as the perceived quality and reputation of an institution and its programs. Interestingly, it is during the search phase that, as students are searching for information about colleges, colleges are often searching for and recruiting students. While many colleges may try to recruit students through the use of financial aid awards, Freeman (1984) found that personal communication from faculty and administration appeared to influence students’ choices as they moved from the search stage to the final phase of the model, the choice stage. By the end of the second stage, students have developed a choice set, which is a “group of institutions that a student has decided to apply to and seek more information about in order to make a better final matriculation decision” (Hossler & Gallagher, 1987, p.214).

During the last stage of the Hossler and Gallagher model, the *choice* stage, students who decided to attend college during the first stage and developed a choice set during the second stage, begin evaluating their choice set before finally choosing the college they will ultimately attend. During this stage, students decide which institution would ultimately be a good fit for them. Although the definition of what is a good fit

may vary for each student, Hossler and Gallagher (1987) found that students often point to similar variables, including the quality of the college, financial aid availability, and the college's "courtship activities" (p. 217). Freeman (1984) found that students were more likely to choose a college as the amount of financial assistance it offered increased and that personalized communication from a college increased the likelihood that a student would ultimately choose to matriculate at that institution.

Since current research suggests that most LIHA students do not attend selective universities because they do not apply, the current study focused on the *search* stage of Hossler and Gallagher's model, when students decide where to apply and, ultimately, where to enroll. Since the Hossler and Gallagher model is a broad model of college choice, there may be variables that influence LIHA students' college application and choice decisions that would not influence the decisions of the student population in general. For example, although Hossler and Gallagher found that increased financial aid and perceived quality of a college could positively influence a student's application and choice decisions, these variables do not appear to heavily influence the application and choice decisions of most LIHA students since these students could attend some of the nation's most prestigious colleges at little or no cost, yet most LIHA students do not apply to those schools. Therefore, it is important to determine if there are common variables among LIHA students who do apply to selective universities, an area that existing research does not address. Similarly, since research suggests that universities are searching for students at the same time that students are searching for universities, it is important to explore what recruitment activities, if any, LIHA students experience from selective universities.

Significance of Study

Previous research has highlighted the fact that LIHA students do not attend selective universities. Recent research has shown that these students may not attend selective universities because they do not apply to selective universities. Therefore, it is necessary to focus on LIHA students' application decisions. Although there have been some quantitative studies on application behavior using intervention techniques on groups of LIHA students, there have been no comprehensive qualitative studies of these students' application decisions. This is unfortunate, as a greater understanding of the students' application and enrollment choices could help produce measures to increase the number of them applying to selective universities. This could have a significant impact on these students' lives, as previous research has found that attending a selective university has substantial benefits, including access to more resources and a higher likelihood of degree completion (Carnevale & Rose, 2004; Soares, 2007). This study sought to address this knowledge gap by producing qualitative data that could help researchers and scholars better understand LIHA students' college application decisions and the variables that influence their decision to apply to selective universities.

For universities, having a better understanding of why LIHA students apply to their schools could help them adjust their recruiting methods to better reach this demographic. Universities that have a better understanding of the factors that motivate these students to apply and enroll perhaps could use more targeted marketing strategies instead of relying on a generic one-size-fits-all approach to recruitment. This is especially important given that there have been some discussions about ending race-based affirmative action programs at universities in favor of those based on

socioeconomic status instead (Kahlenberg, 2013; Reardon, Baker, Kasman, Klasik, & Townsend, 2016).

Research also suggests that fewer students choose to go to college now than in previous years (Norris, 2014) and that colleges must actively compete to recruit from a smaller pool of applicants (Marcus, 2017). In particular, many universities may want to attract LIHA students because of the prestige that high-achieving students bring to universities, especially given that legislative funding and other forms of political support may be tied to student academic success rates (Bradshaw, Espinoza, and Hausman, 2001). Therefore, research that uncovers potential methods to attract more LIHA students to selective universities may bring as many benefits to the universities as it does for the students themselves.

Organization of Dissertation

I have organized this dissertation in such a way as to highlight the college application experiences of LIHA students at selective universities in the context of existing research. In Chapter Two, I discuss a review of the literature and its relationship to the current study. Chapter Three includes a discussion of the methodological approach I used for the study as well as more information regarding site and participant selection. Chapter Four provides an introduction to the participants of the study, with information about students' backgrounds and the universities at which they are currently enrolled. Finally, Chapters Five and Six discuss the major themes that emerged as findings from the research, as well as some of their implications, and ends with suggestions for further research.

CHAPTER 2

LITERATURE REVIEW

To prepare for this study, I consulted a broad range of existing research and literature on college enrollment decisions; college choice models and the college selection process; high-achieving students; low-income students; and low-income, high-achieving (LIHA) students. Unfortunately, and quite surprisingly, there is not a great deal of literature on LIHA students. Aside from Caroline Hoxby, Christopher Avery, and the Jack Kent Cooke Foundation, very few researchers have focused on LIHA students at selective universities, with even less research available on LIHA students' application decisions. Most of the existing literature on the college choice process focuses on the general student population, with some research on low-income or high-achieving students, but very little on students who are both low-income and high-achieving.

To begin my literature review, I focused broadly on the topic of college students in general and the factors that influence their decision to pursue a post-secondary education. I then conducted a review of existing models of college choice. Next, I narrowed my attention to low-income students and the possible influence of income and socio-economic status on post-secondary school decisions. Subsequently, I focused on the college selection process. I began by looking at the college selection decisions of the general student population. Next, I examined the factors that influence high-achieving students' college selection decisions. Then, I narrowed my focus even more to concentrate on a specific subset of low-income students: LIHA students. Finally, I

focused on those LIHA students who applied to and ultimately enrolled in selective universities.

Overview of Students and Their Desire to Attend College

Researchers in the field of higher education have studied post-secondary education decisions and college choice since at least the 1960's (Lee, Almonte, & Youn, 2013). Most of these researchers, including well-known scholars such as Cabrera and LaNasa (2000), Chapman (1981), and Hossler and Gallagher (1987) have focused on the general student population in the United States. Chief among their concerns have been students' decisions whether to attend college or to pursue some other life path, including attending vocational schools or heading directly into the labor force.

Based on their studies, most researchers have attempted to develop a list of student characteristics or external factors that positively or negatively influence a student's decision to attend college. Previous models of college choice have been relatively similar, with most models differing largely based on the number of stages each researcher identifies as part of the college choice process. For example, while Kolter (1976) designed a model of college choice with seven stages, Hanson and Litten (1982) developed a model with five, and Hossler and Gallagher (1987) developed a more simplified model with three.

Although the number of stages varies from model to model, each of the models is relatively similar in that each begins with a student's desire to go to college, followed by a search or evaluation stage, and ends with a student's decision to enroll, or not, in a college. Nora and Cabrera (1992) found that this process usually takes place between grades seven and twelve. These models examine several factors, both sociological and

economic, influencing students' decisions to attend college, including student academic ability, parental encouragement, and other economic factors such as the cost of attendance and availability of financial aid.

Jackson (1982) found that among the variables that influence a student's decision to attend college, a student's personal aspirations and goals, such as a desire to work in a specific career, along with a student's level of academic ability, were often the most crucial. Jackson and other researchers have also found that students who decide to go to college often cite parental encouragement as an important factor. Based on their study of college choice decisions by recent high school graduates, Conklin and Daily (1981) found that high school students who reported that they were encouraged by their parents to attend college and perform well academically were more likely to enroll in a four-year university than their peers who reported less parental encouragement. Hossler, Braxton, and Coopersmith (1989) reported similar findings and noted that parental encouragement was often higher for higher-achieving students. This, of course, raises the question as to whether high levels of parental encouragement lead to better student academic performance or if the high academic performance is what leads to increased levels of parental encouragement.

College Enrollment Decisions of the General Student Population

Before focusing exclusively on the college choice decisions of LIHA students, I began by doing a more broad review of the existing literature on students' decisions to attend college. I began by looking generally at the college choice decisions of high school students without regard to their family income levels. By beginning with a review of existing research on the general population of high school students, I was able to

progressively narrow my focus and gain a better perspective of how LIHA students' decisions were similar to and differed from students in general. Ultimately, this allowed me to see how existing research on the college decisions of the general student population may not adequately explain the college application decisions of LIHA students and how my research study could help fill the gaps in that body of literature.

According to findings by researchers such as Hossler and Gallagher (1987), Chapman (1981), Jackson (1982), and Hossler, Braxton, and Coopersmith (1989), students begin to think most seriously about the possibility of attending college during the end of their high school years. This makes sense, of course, since students are ending one important chapter of their lives and must make a decision about what they want to do in the future. Students may choose from many options, including attending a four-year university; choosing to attend a technical or vocational school to learn a trade; going straight into the labor force; or in some cases, taking time off, such as a gap year to travel or study abroad, before making their final decision.

Many students at this stage of their lives may not be very educated about the intricacies of higher education and may not have a lot of information about specific universities or the cost of attendance. Therefore, researchers including Hossler and Gallagher (1987) have found that at this stage, students' decisions about post-secondary plans may hinge more on personal characteristics rather than institutional ones, such as students' personal aspirations and career goals, their academic ability, the level of parental encouragement they receive, and even their relationships with close friends and high school peers.

Personal Aspiration and Career Goals

Personal aspirations and career goals may play an important role in a high school student's decision whether to pursue higher education (Hossler & Gallagher, 1987; Jackson, 1982). For students who would like to pursue a particular profession, such as becoming a doctor, lawyer, or professor, earning a degree from a four-year university and even a graduate school seems like an obvious choice. Similarly, it would make sense that students who are more interested in entering the workforce quickly with specialized training in a specific vocation may be more inclined to attend a local community college or trade school. However, the idea that a high school student's decision to attend college is motivated primarily by personal career goals or aspirations is not as clear.

The idea that students are making their college choice decisions based on personal long-term goals may hinge on whether those students are basing their decisions on some type of rational choice, when students weigh the pros, cons, and potential risks of various decisions and then pick the one that is most likely to help them reach their goals most efficiently (Tierney & Venegas, 2009). Of course, if a student decides to pursue a specific career and then chooses a school and a major that can help achieve that goal, the student is making a rational choice.

There is evidence that students often choose to go to college because they want to have a specific career or because they have a goal of earning more money. For example, in a study of West Virginia high school students, students were more likely to state that their reasons for going to college were for more money and status or for personal self-improvement and less likely for external reasons or just to escape (Chenoweth & Galliher, 2004). Similarly, Strang (2015) notes a study by Cengage of the college choice

decisions of currently-enrolled college students, which found that 73% of college students indicated that being able to get a good job was their primary reason for attending college. Furthermore, 88% of those same students indicated that their major was specifically tied to the career they wanted to pursue. However, as the author points out, these results indicate that there were 15% of students who chose a major because they thought it would help them get a specific job but did not necessarily decide to attend college because of that same career goal. The author states that:

From this, we conclude that some students believe that what they study in college will help them earn a career of value...but in and of itself, the decision to attend college is driven by another (perhaps more personal) goal or dream. (para. 4)

Of course, another explanation for the decisions of those 15% of college students is not that they decided to attend college because of another more personal goal or dream but that their decisions were based on another variable entirely, such as their academic ability, parental encouragement, or the behavior and decisions of their friends and peers.

Academic Ability

With the exception of some community colleges or trade schools that have an open-door admissions policy, most universities generally place a high degree of importance on students' high school grades and, to an extent, on their performance on standardized tests such as the SAT and the ACT as well (College Board, n.d.; Ritger, 2013). This is understandable, of course, since universities, especially selective universities, want to ensure that the students they admit have the ability to successfully take on the rigorous academic coursework that they will encounter.

Research has shown that for the general student population, there is a strong correlation between a high school student's level of academic ability and achievement and the student's plans to attend college (Davies & Guppy, 1997). Because students may know that universities are interested in recruiting and enrolling the strongest applicants, those with the highest grades may feel more comfortable applying to colleges, whereas students who are lower performers may decide instead to attend a technical school or to go directly into the workforce. Studies have also shown that high school students tend to apply to, and enroll in, more selective universities as their performance on standardized tests increases (Cabrera & LaNasa, 2001; Davies & Guppy, 1997).

One major issue with the role that academic ability plays in a student's decision to attend college is the fact that many students may be placed in courses that do not provide college preparatory work or that allow students to demonstrate their true academic ability. Unfortunately, this tracking often begins in elementary school, when students are grouped by schools according to their perceived academic ability or potential (Wheelock, 1992). Unfortunately, students may end up grouped more for organizational convenience rather than for any true benefit to the students. According to Hallinan (1992):

In general, this research seems to conclude that ability grouping increases the variance in students' achievement, resulting in an even greater disparity between high and low achievers and thus raises questions about the equity of ability grouping as a pedagogical practice. (p. 115)

The Organization for Economic Cooperation and Development (OECD) (2015) found that early tracking of students leads to students from disadvantaged backgrounds, such as those from lower-SES backgrounds, as well as immigrants, being placed into lower

tracks. In fact, the OECD found that “after accounting for socio-economic status and performance in reading and mathematics, immigrant students are 44% more likely than non-immigrant students to be enrolled in vocational programmes” (p. 14). Therefore, although there is a correlation between academic ability and a high school student’s decision to attend college, there is also evidence that some students may be put on a path away from college preparatory courses as early as elementary school. During their elementary, middle, and high school years, students may be placed in courses that do not give them an opportunity to demonstrate their true level of academic ability, thus placing them on a vocational track rather than a collegiate one, or discouraging them from pursuing any type of higher education.

Parental Influence and Encouragement

When it comes to a high school student’s decision to attend college, research has consistently demonstrated that parental influence and encouragement are highly important factors, regardless of socioeconomic status or ethnicity (National Postsecondary Education Cooperative, 2007). Educational researchers, including Conklin and Daily (1981); Hossler, Schmidt, and Vesper (1999); Jackson (1982); and Perna (2000) have found that students who feel encouraged by their parents to enroll in a college are much more likely to attend college than those students who report lower levels of parental encouragement. According to these researchers, parental influence and encouragement may play out in a number of ways, including through discussions with children about their personal goals and through communication of parental expectations that their children will attend college.

One way that parents may exert influence over their children's decision to attend college is through their personal knowledge of the college experience. Research has demonstrated that the more education that parents have, the more likely it is that their children will also attend college (Karen, 2002). In this regard, parental education can be seen as a type of social capital that is passed on to children. Parents who attended college are familiar with the process of applying to college, including factors such as choosing a major and applying for financial aid. In fact, levels of parental education may temper the influence of parental encouragement in general. Research has shown that college students are more likely to say that their parents were influential in their decision to go to college if their parents also went to college, rather than if they were first generation college students (Noel-Levitz, Inc., 2009).

Parents may also influence their children's decisions in a myriad of other ways. For example, Noel-Levitz, Inc. (2009) found that when students said their parents heavily influenced their decision to go to college, the parents often shared several characteristics. These parents talked about grades with their children; helped their children choose their classes in high school; volunteered at their children's schools; and even helped complete college admissions forms and applications for financial aid (p.5).

Finally, it is interesting to note that there appears to be a special relationship between parental encouragement and students' academic achievement. As noted previously, there is a strong correlation between a students' academic ability and their decision to pursue a college education. Similarly, there is a correlation between high levels of parental encouragement and the decision to attend college. Interestingly, though, it appears that there is also a correlation between high levels of parental encouragement

and parental expectation and high levels of student academic ability and achievement.

According to Hossler and Stage (1992):

Carpenter and Fleishman's (1987) study found that as parental expectations increased, so did student achievement. This may indicate a reciprocal relationship among parental expectations, student achievement, and student predisposition. As students perform better in school, parents increase their educational expectations, which in turn provide further motivation for students to improve their performance. (p.432)

Thus, we see that parents can exert a strong influence on a student's decision to go to college. Some parents may influence students directly by choosing high school classes for them or by helping them complete college applications. Other parents, though, may influence their children in an indirect way, by sharing their personal college experiences with their students, making them more comfortable about the idea of going to college, and by encouraging (and sometimes expecting) them to be high academic achievers while in high school.

Peer Relationships

Another fascinating variable that may impact a student's decision to go to college is the influence and decisions of the student's peers. Although there is no consensus on the degree to which peer choice might influence a high school student's post-secondary educational aspirations, there is a growing body of evidence that suggests that students' close friends may affect their decision whether to attend college. As with parental encouragement and influence, it is necessary to take a close look at the complex role that peer relationships may play in a student's decision to pursue a college education.

One of the first reports to suggest that students' peers may influence their plans to attend college was the Equality of Educational Opportunity Report, also known as the Coleman Report (1966), which found that there was a correlation between peer aspirations and a student's academic achievement. As previously discussed, high academic ability and achievement is strongly correlated with a student's decision to pursue a post-secondary education. Other researchers have made similar findings. For example, Falsey and Heyns (1984) completed a study comparing students enrolled in public high schools versus private high schools. They found that students in private schools were much more likely to go to college and one of the reasons why was because these students were surrounded by peers who also aspired to go to college. Fletcher (2015) found in his study of high school students that "a 10% increase in peer college enrollment increases the likelihood of own college attendance by 4.6 percentage points" (p.503).

One of the complications of measuring the influence of peer relationships on a student's decision to attend college is that it is difficult to measure the impact of this variable in isolation, since there may be many variables that influence a student's decision to attend college. For example, one mitigating variable may be sex. According to Chenoweth and Galliher (2004):

In examining the influence of peers on students' college decisions, we tested the relationship between the primary friend's plan to attend college and the student's plans to attend college separately for males and females using chi-square analyses. A strong relationship emerged for males, but not females. Males who were not planning to go to college were less likely than those who were planning

to go to college to report that their primary friend was going to college. Most females, however, reported that their friends were planning to go to college, regardless of their own plans. (p.5)

Similarly, those students at a private high school, whom Falsey and Heyns (1984) discussed, may have been surrounded by peers who aspired to go to college, but they also had access to other resources, including more time with teachers and guidance counselors and more parental involvement. Having said that, existing research on the influences on students' educational plans suggests that neither teachers nor high school guidance counselors have much influence on students' decisions whether to attend college. According to the National Postsecondary Education Cooperative (2007), "student and parent focus group participants rarely mentioned teachers as academic role models" (p.20). Hossler and Stage (1992) concluded that "overall, it appears that counselors and teachers have very little influence upon the predisposition stage of most high school students" (p.433).

While there appears to be some kind of relationship between peer aspirations and a student's decision to attend college, the amount of influence they have is not clear. Furthermore, there is some evidence that students who do *not* plan to attend college are more likely to discuss post-high school plans with their friends than are those students who do plan to attend college (Hossler & Stage, 1992). Clearly, further research is needed to study the effect of this variable on students' college attendance decisions.

Effect of Income on Student Achievement and College Enrollment

Before beginning a discussion of the influence of income levels and socioeconomic status on students' college application decisions, it is important to take a

broader look at the role that family income plays in student achievement levels in general. Based on findings, including those by Bradley and Corwyn (2002) and Conger, Conger, and Martin (2010), family income appears to be highly influential in the academic achievement levels of students, with students from low-income families being at a startling disadvantage compared to their peers from families with higher incomes. Having a better understanding of the ways that family income can influence academic performance among students may help the reader better understand the mindset and decisions of low-income students as they navigate the college decision-making process. Furthermore, having a greater understanding of the effects of socioeconomic status on academic achievement may help readers recognize the obstacles that many low-income students face and often overcome during their journey to college.

When examining the impact that family income has on academic achievement, one can begin with the fact that many low-income students may not have access to the same resources that their higher-income peers may have. For example, students from higher-income families may have access to academic books and journals, private tutors, and even preparatory courses to improve their scores on standardized tests, such as the SAT and ACT. These are all resources and opportunities that low-income students tend to lack (Bradley & Corwyn, 2002).

Family income may also negatively impact a low-income student's academic achievement in more indirect ways. For example, researchers have found that socioeconomic status may influence the stability of parental and familial relationships and that negative economic conditions are correlated with increased levels of stress and other behavioral problems in families (Conger, Conger, & Martin, 2010). Other

researchers have found that students who grow up in families with low-incomes tend to have more behavioral problems in the classroom than their fellow students from families with higher incomes (Parker, Boak, Griffin, Ripple, & Peay, 1999). Similarly, some researchers estimate that “by age 3, children whose parents receive public assistance hear less than a third of the words encountered by their higher-income peers” (Egalite, 2016, p.72).

Since students from families with low incomes may face a number of challenges, including higher levels of stress and less exposure to academic resources, it may be difficult to establish a direct, causal relationship between family income and the academic achievement of students. According to researchers Dahl and Lochner (2005):

In particular, children growing up in poor families are likely to have adverse home environments or face other challenges which would continue to affect their development even if family income were to increase substantially. These concerns have prevented the literature from reaching a consensus on whether family income has a causal effect on child development. (p.1)

In an effort to study the influence of family income on student achievement levels and to help determine if there was a causal relationship between the two, Dahl and Lochner (2005) conducted a study that examined changes in the Earned Income Tax Credit (EITC) over two decades (the 1980’s and 1990’s) along with student scores on standardized tests (specifically, the Peabody Individual Achievement Tests). The researchers found that increasing the amount of tax credits and thus the incomes of poor families could increase the academic achievement levels of low-income students. The researchers found that a family’s income level had a significant impact on student

achievement levels and, according to their estimates, “a \$1,000 increase in income raises math test scores by 2.1% and reading test scores by 3.6% of a standard deviation” (p.30). The researchers also point out that not only are increased family incomes correlated with increased levels of academic achievement, but that increased academic achievement is also correlated with future increases in student lifetime earnings. According to the researchers:

For children growing up in poor families, extra income does appear to have a positive causal effect. While our estimated effects are modest, they are also encouraging. They imply that the maximum EITC credit of approximately \$4,000 increases the math scores of affected children by one-twelfth of a standard deviation and reading scores by nearly one-sixth of a standard deviation. Based on previous estimates of the effects of test scores on subsequent earnings, our results suggest that the EITC raises the future earnings of affected children by as much as 1-2%. (p.30)

Other researchers investigating the influence of income on academic achievement have studied the ways in which family income may indirectly affect student academic performance by approaching the issue through psychological and sociological perspectives. For example, Lam (2014) found that low-income students tend to be treated differently than their high-income peers by both parents and teachers, with both having much lower expectations for high academic performance by low-income students. Lam points to research by Bradley and Corwyn (2002), which found that low-income students are often placed in classrooms with students of lower academic ability, and receive less attention and praise from their teachers than their higher-income peers.

According to Lam, low expectations by teachers and parents lead to low-income students having low expectations for themselves, which leads to a self-fulfilling prophecy in which teachers, parents, and students themselves expect poor academic performance.

Other researchers have also examined the idea of low-income students' expectations and mindsets affecting their academic achievement. Claro, Paunesku, and Dweck (2016) conducted a large-scale study of 168,000 high school students in Chile. The study examined the influence of student mindset on academic achievement. In the study, the authors compared students who had growth mindsets with students who had fixed mindsets. A growth mindset refers to those students who believe they can develop stronger academic abilities through their personal efforts, while a fixed mindset refers to those students who believe that their level of intelligence is fixed. The study's authors found that low-income students who had a growth mindset, and thus believed they could learn new skills and develop new abilities, earned standardized tests scores that were similar to their peers who came from much higher-income families but who had fixed mindsets. However, the authors noted that students from the poorest families had fixed mindsets at double the rate of their higher-income peers. Therefore, we see that income may affect academic achievement indirectly by leading students to believe that they cannot learn and develop new skills, leading to a self-fulfilling prophecy. This problem may be compounded if low-income students with a fixed mindset are in classes together, as previous research has suggested that low-income students are much more likely to go to college if they have friends who also plan to attend college (Sokatch, 2006).

Current research suggests that family income is strongly correlated with student academic achievement. Specifically, students who come from families with lower

incomes tend to perform at levels much lower than their peers from higher-income families. Although some research suggests that many of the difficulties low-income students tend to face, such as having a fixed mindset or coming from families with higher levels of stress, may not be causally related to income, other research suggests that increasing family income does lead to higher levels of academic achievement. As previously discussed, high academic achievement is strongly correlated with an increased desire to go to college. Therefore, low-income students may be discouraged from pursuing a college education because of perceived academic deficits and because these students tend to focus more on vocational training than their peers from families with higher incomes (Delaney, 1998).

College Choice Decisions

While many researchers have focused on a student's decision whether to attend college, there has been much less focus on the selection of particular institutions and the factors that lead a student to choose one college over another. Some researchers, including Kolter (1976) and Litten (1982), created models of college choice to demonstrate the process that students go through when selecting a specific university. However, the various college selection models do not differ greatly in terms of the variables that influence students' college selection decisions, but rather in the number of stages that the researchers identified. In fact, both Kolter (1976) and Litten (1982) identified similar variables to those later identified by Jackson (1982), Cabrera and LaNasa (2000), and Flint (1992) as being influential in the college choice process.

Jackson (1982) found that the availability of financial aid and a university's cost of attendance were important to students when they chose where to matriculate. Jackson

also found that geography was an important factor and that high school students might not apply to a university that is far from home, especially if they do not have much information about the school. In their review of the literature, Cabrera and LaNasa (2000) and Flint (1992) note that students who come from families with higher incomes usually have more information about college costs than their lower-income peers and tend to search for schools in a wider geographical area.

Based on their research, Hossler and Gallagher (1987) consolidated several stages of previous college choice models into three stages to create a model that was comprehensive yet more simplified than the previous models. Figure 2.1 offers a comparison of Hossler and Gallagher’s model with those by Kolter (1976) and Litten (1982).

For the current research study, I used Hossler and Gallagher’s model of college choice to explore the stages and variables that influence students’ college choice decisions, beginning broadly with the general student population and then narrowing my focus to LIHA students at selective universities and the variables that could potentially influence their decision-making process during the college selection phase of the model.

Comparison of College Choice Models	
Kolter (1976)	Student decides to attend college → Student collects information → Student investigates specific colleges → Student applies → Student is or is not admitted → Student chooses specific college → Student matriculates
Litten (1982)	Student has college aspirations → Student searches for colleges → Student collects information → Student applies to colleges → Student enrolls in a college
Hossler & Gallagher (1987)	Predisposition → Search → Choice

Figure 2.1: Comparison of several models of college choice.

Hossler and Gallagher Model of College Choice

One of the most well-known and studied models of college choice is the framework created by Hossler and Gallagher (1987). According to the Hossler and Gallagher model, college choice can be seen as a three-phase process that involves *pre-disposition*, *search*, and *choice*, with many different variables influencing student decisions during each stage of the process. As students progress through this process, some stages may overlap, so that each step of the college choice process is not always clear-cut and linear. However, the college application decision, which was the focus of this study, tends to happen toward the end of the process, during the second and third stages.

The first stage of the college choice process according to the Hossler and Gallagher model is pre-disposition, when students decide if they want to pursue post-secondary education or if they want to seek other options, including going straight into the workforce. If at the end of the disposition phase students have decided to pursue higher education, they move on to the search phase. During the search phase, students begin to search for information about colleges and universities that they may be interested in attending. During this phase, Hossler and Gallagher point out that the major variables that influence student choice include perceived costs, financial aid availability, and the perceived reputation of a school and/or its programs. At the end of the second stage, students have developed a choice set, which Hossler and Gallagher (1987) define as “a group of institutions that a student has decided to apply to and seek more information about in order to make a better final matriculation decision” (p.214).

During the third and final stage of the Hossler and Gallagher model, the choice stage, students examine their choice set and determine which university they will ultimately attend. During this stage, Hossler and Gallagher found that students tend to identify many of the same variables that influence their final matriculation decision, including the perceived quality of the institution, financial aid availability and universities' own recruitment activities.

Because existing research indicates that LIHA do not generally attend selective universities because they do not apply (Hoxby & Avery, 2012; Giancola & Kahlenberg, 2016), the current research study focused on the second stage, or search phase of the Hossler and Gallagher model (and because the Hossler and Gallagher model has a clearly defined search phase, this made it more attractive than many of the other models). Clearly, the variables that Hossler and Gallagher identify as influencing the application decisions of the general student population do not appear to heavily influence the college application decisions of LIHA students. After all, if LIHA students were heavily influenced by financial aid availability or the perceived reputation of a university, it makes sense that they would apply en masse to the most selective, prestigious universities, which offer the most financial aid and may therefore cost LIHA students little or nothing to attend. Thus, the variables that appear to heavily influence the college application decisions of most students do not seem to heavily influence the application decisions of LIHA students.

College Choice Decisions of High-Achieving Students

If we take a narrower look at the college application process, focusing on high-achieving students' application decisions rather than the general student population, it

appears that the variables influencing high-achieving students do not heavily influence the application decisions of LIHA students. For example, a study of college choice by Jackson and Chapman (1987) that included mainly high achieving students found that the students' perception of a university's quality or reputation was an important factor in their decision to apply to that school, just as Hossler and Gallagher's model described for the general student population. Jackson and Chapman also noted that financial aid was an important variable in the college application decisions of high achieving students, and that large amounts of financial aid could change these students' application decisions.

The findings of a more recent study of high achieving students also support the idea that financial aid availability is important in the college selection process of this group of students. Schoenherr (2009) studied the college selection process of high achieving students who chose to attend more selective universities than their fellow high achieving peers did. Schoenherr, who tested variables from Hossler and Gallagher's model as a framework for her study, found that financial aid availability was the most influential variable in determining if a high achieving student would attend a more selective or less selective university. Schoenherr found that the cost of attendance and the reputation of the university were also important to high achieving students, but that the major variable influencing their decisions was financial aid availability.

Another study of high achieving students, conducted by Lipman-Hearne (2009), found that high achievers chose to apply to universities that they thought would be a good fit. However, as the study points out, "the idea of a perfect fit is so customized to the individual that an analysis of aggregate responses would not be helpful" (p.31).

Nevertheless, when directly asked what the most important factor was when deciding

where to apply, the high achieving students were much more likely to say “cost” in 2009 compared to 2006. For one group of high-achievers in the study, “the importance of cost more than doubled between 2006 and 2009, from 11% of students calling this factor ‘most important’ in 2006 to 23% in 2009” (p.26). When the study’s authors asked high achieving students in 2009 if it was best to enroll in the university that offered the most amount of money, the level of agreement increased 54% since the last time the question was asked in 2006 (p.26). The study notes that students pointed to many other factors that influenced their application and enrollment decisions, such as the university’s reputation, variety of academic programs, and even university facilities.

With this example, though, we see once again that the factors that appeared to influence these high achieving students’ college application decisions do not appear to influence the decisions of LIHA students. If LIHA students were as concerned as high achieving students in general with receiving the most financial aid awards, reputation, or even quality of university facilities, it makes sense that they would apply to the most selective universities, which are in a good position to offer all of those options. These results provide more evidence that the variables that influence the college application decisions of high achieving students may not be the same variables that influence the college application decisions of LIHA students.

College Choice Decisions of Low-Income Students

If we narrow the focus of college application decisions once more, from college students in general to only low-income students, we see a more worrisome problem in which socioeconomic status negatively affects students’ college choices. For low-income, non-high-achieving students, most studies do not focus on how they make their

college application decisions, but rather if they will apply to any college. Although financial aid availability has increased over the last decade, the percentage of low-income students who attend college immediately after high school has fallen from 56% to 46% since 2008 (Granger & McAnuff, 2016). However, for those low-income students who do attend college, financial aid does seem to influence their college application and enrollment decisions, in line with Hossler and Gallagher's model. Perna and Titus (2004) found that low-income students tend to go to two-year schools instead of four-year universities but that those states that offer students more financial aid usually have more students in private four-year universities than states that offer lower amounts of financial aid. Therefore, it appears, as with both the general population and high-achieving student populations, financial aid availability may be highly influential in a low-income student's college application decision, but that does not appear to heavily influence the decisions of LIHA students.

College Decisions of Low-Income, High-Achieving Students

The bulk of existing literature on students who are both low-income and high-achieving indicates that although there are many LIHA students in the United States, the vast majority of them do not attend any selective university. Instead, LIHA students are much more likely to attend the nation's least selective schools, with nearly a quarter of LIHA students attending community colleges (Wyner, Bridgeland, & DiIulio, n.d., p.5). However, there is no clear agreement among researchers as to why more LIHA students do not attend selective universities.

The most recent studies reveal that a primary reason why LIHA students do not attend any of the country's selective universities is that they do not apply for admission

(Hoxby & Avery, 2012). Previous studies involving intervention techniques to increase the number of LIHA students applying to selective universities have had limited success. So far, researchers and scholars have been unable to reach a consensus about why these students do not apply to selective universities and how to increase the percentage of the students who do apply. However, existing research points toward college application as an individual process, upon which external variables such as tuition and application fee costs have had little effect. Furthermore, although these existing studies test variables that may influence LIHA students' college application decisions, there are no studies of which variables LIHA students themselves identify as the most important or influential in their college selection process, a gap that this study sought to fill through qualitative methods.

Profile of LIHA Students in the United States

According to data from the Jack Kent Cooke Foundation (n.d.), “a private, independent foundation dedicated to advancing the education of exceptionally promising students who have financial need” (“About us”), very little is known about low-income, high-achieving students, whom it defined in a recent report as “students who score in the top 25% of nationally normed standardized tests and whose family incomes (adjusted for family size) are below the national median” (Wyner, Bridgeland, & DiIulio, n.d., p.4). The fact that we know so little about this group of students is surprising given the size of this demographic. According to the Foundation, there are around 3.4 million children in grades K-12 whom it would define as LIHA, which the Foundation notes is “larger than the individual populations of 21 states” (Wyner, Bridgeland, & DiIulio, n.d., pp. 4-5).

Despite their academic ability, data from the Foundation show that LIHA students are more likely than their high-income, high-achieving peers to attend the *least* selective colleges and universities and less likely than their high-achieving, high-income peers to graduate when they do attend these least selective schools (p.4), although there is no clear consensus as to why this is the case. In fact, research by the Jack Kent Cooke Foundation found that "72 percent of students in the nation's most competitive institutions [come] from families in the wealthiest quartile" (Giancola & Kahlenberg, 2016, p.1). Another study found that at the most selective universities in the United States, only 3% of students were from the bottom 25% of income levels (Carnevale & Rose, 2004).

This disparity between LIHA students and high-income, high-achieving students seems to hold constant despite the students' levels of academic achievement in high school. For example, Radford (2013) found in a quantitative study of 900 public high school valedictorians that those from lower incomes were much less likely than their high-income peers to attend a selective university after graduation. One interesting finding from the study, which supports findings by Hoxby and Avery (2012), was that "high-SES students were more likely than low-SES students to attend a most selective private college *because they applied at much higher rates*" [emphasis added] (p.6). This is an important finding, as the author notes that the valedictorians appeared to be "funneled toward and away [from] most selective private colleges" (p.4) during the application stage. This finding is supported by research from the Jack Kent Cooke Foundation, which found that only 23% of LIHA students apply to a selective school, while more than double that amount (48%) of their high-income, high-achieving peers apply (Giancola & Kahlenberg, 2016, p.13).

The fact that we know so little about LIHA students despite their numbers and their potential for collegiate success is surprising. However, because so little is known about this group of students, my study can contribute greatly to the body of existing work by giving LIHA students an opportunity to share their college application experiences and thereby expand researchers' understanding of LIHA students and the variables that influence their college application decisions.

Influence of Mentors and Family Members

During Radford's (2013) study, the author noted through follow-up interviews with a subsample of 55 valedictorians that "high schools' guidance in providing information on college admissions, financial aid, and college options was woefully lacking, even in more affluent communities" (p.5). When unable to receive personalized guidance counseling in their high schools, the valedictorians in the study relied on their families to provide information and assistance. Since the families of low-income students were less knowledgeable about universities and financial aid, relying on them for information allowed "social class to have an unnecessarily strong influence on where students ultimately enroll[ed]" (pp.6-7). For this study, Radford developed a revised version of Hossler and Gallagher's (1987) model of college choice, which she called the "college destination model" (p.3). However, the study explored the subject of which schools these students attended but did not center on their choices or reasons for attending.

Despite this study's claim that allowing LIHA students to rely on information from their family could cause "the disadvantages of one generation to be passed on to the next generation" (p.7), another study indicates that families of LIHA students could be a

source of encouragement for the students to attend a selective university. In their book, *Beating the Odds: How the Poor Get into College*, Levine and Nidiffer (1996) discuss a qualitative study of 24 low-income students who enrolled in college. Twelve of the participants were students in an unidentified, selective university in Texas. Although the authors do not specifically study application decisions or school choice, they do note that all the LIHA students at the selective university mentioned teachers or family members as the individuals who encouraged them to attend college. The authors note that students pointed to family members as sources of encouragement three times as frequently as they pointed to teachers (p.80). Therefore, while this study seems to support Radford's claim that LIHA students turn to their families for information about college, it also suggests that doing so may not necessarily deter a student from attending a selective university and in fact may be a great source of encouragement.

Path to College as Individualized Process

An interesting detail that emerged during Levine and Nidiffer's (1996) study was that each student had a unique story about making it to college in the face of countless obstacles. Although the students' stories shared a common theme of having some type of mentor who encouraged them to attend college, they were not all the same type of mentor. While some students credited family members for their encouragement, others pointed to teachers, therapists, or other supporters. Thus, the authors concluded, "the process by which poor people come to attend college is an individual rather than mass phenomenon" (p.143).

Perhaps it is because of these wide-ranging, individual circumstances of LIHA students that researchers have been unable to find broad categories of explanations for

why these students choose whether to apply to selective schools. In fact, a 2011 qualitative study of high-achieving students at a large, public four-year university in the Southwest seems to support that possibility (Furukawa, 2011). In the study, the author conducted focus group interviews with seven high-achieving students in order to understand the students' perceptions of what influenced their college choice. The researcher was able to identify nearly as many major influences as there were study participants. The study identified six areas that students perceived to be highly influential in their college choice, including "family, peers, institutional characteristics, institutional communication, institutional fit, and comparison with other institutions" (p.120). The study's author noted, "College choice is a very individualized decision process for a student. As such, previous research on the topic has provided models, but no specific formula leading to recruitment effectiveness" (p.118). The researcher notes that this was a small study at only one campus involving only high-achieving students, without regard to their income, and calls for more research involving high-achieving students.

These research studies have suggested that students may have very personal, individual reasons when choosing whether to attend college in general and a specific school in particular. However, many scholars have continued to speculate as to whether there are still broad reasons why LIHA students do not apply to selective universities, such as cost of tuition, lack of information about college choices, or costs associated with college applications (e.g., see Avery, 2009; Hoxby & Turner, 2013). Nevertheless, studies testing the influences of these variables have yielded mixed results. In the next section, we will review some of these variables in more detail.

Tuition, Lack of Information, and Fees as Barriers to Application

The cost of attending a selective university does not appear to be a reason why LIHA students do not apply to selective universities, as these students could actually pay *less* to attend these universities than non-selective ones, due to generous amounts of financial aid available to low-income, high-achievers (Stanford University, 2013). In fact, an initial analysis of the impact of Harvard's 2005 decision to charge zero tuition to students earning less than \$40,000 per year showed that the change had little success in attracting more LIHA students (Avery, Hoxby, Jackson, Burek, Pope, Raman, 2006). In a more recent study, Hoxby and Avery (2012) note this study and point out that "Harvard's policy change had very little effect-at least, very little short-term effect-on the income composition of its class. We estimate that it increased the number of low-income students by approximately 15, in a class of more than 1600" (p.5). Thus, it appears that the cost of tuition and availability of financial aid may not be key factors when low-income students decide whether to apply to selective universities. This is astonishing, given that LIHA students who attend a selective university, such as Stanford, could pay zero tuition for an education that, over four years, would normally cost around a quarter of a million dollars based on 2015-2016 tuition figures (Stanford University, 2015). According to schools such as Yale University (2017), Duke University (2017), and Harvard University (2017), these scholarships are typically awarded not as lump sums of money but rather as a notice to students that they do not have to contribute any money toward their tuition, books, room, or board. Instead, students typically must contribute a small amount each semester via on-campus jobs. However, other outside grants or

scholarships can also cover that amount. For more information on institutional awards, refer to the section “Participants’ Cost of Attendance” in Chapter Four.

Avery (2009), in his research, focused on the broad issue of student access to information and counseling as potential barriers for LIHA students. According to the researcher, the study centered on the possibility that “talented students from low-income families may not have enough information and expertise to navigate the college admission process and enroll at the (selective) colleges that match their qualifications and interests” (p.3). To test this possibility, the study tracked 107 LIHA students as they applied to colleges during their senior year of high school. The researchers randomly chose 52 of the students to receive 10 hours of personalized counseling with a college counselor. 45 of the students accepted the offer to receive counseling, although more than one-third of them did not necessarily follow all the advice they received. The results of the study indicate that students who received personalized college counseling were only slightly more likely than those who did not receive it to enroll in a selective university and the results were not statistically significant.

To test the possibility that the cost of applying to universities could deter LIHA students from applying to selective universities, Hoxby and Turner (2013) conducted a large, quantitative study of high-achieving students in the United States whom they estimated to be low-income. The students received application fee waivers that allowed them to apply, at no cost, to 171 different universities (p.10) as well as information comparing, for example, university graduation rates and the typical net costs of attending different universities. Based on their data, the researchers concluded that the intervention

“[raised] their probability of applying to a very selective private university by 17% and their probability of applying to a very selective liberal arts college by 15%” (p.23).

Since the researchers sent the students both fee waivers and customized information, it is difficult to determine exactly what influenced the students’ decisions. Did they decide to apply because it was free or did information about graduation rates have more of an impact? Perhaps information about the net costs of the colleges had more influence. Furthermore, as the authors note, low-income students are *already* eligible to have most college application fees waived. Thus, this was not a new benefit for these students, though the intervention most likely made access to the waivers more convenient. Since this was a quantitative study, there were no interviews with students who could provide more detail about their ultimate choice to apply or not.

Testing Variables Identified Through Existing College Choice Models

A recent, in-depth analysis of various models of the college-going process showed that most of the data that we have today about how students decide whether and where to attend a university are quantitative (Bergerson, 2009). The analysis, which examined well-known models such as those by Hossler and Gallagher, Cabrera and LaNasa, and others, noted these models searched for different variables that influenced students’ decisions about whether and where to attend a university. However, these models did not focus on LIHA students specifically and the previously mentioned studies indicate that several of the variables in these models, including tuition cost and interaction with guidance counselors may not be heavily influential, at least not when applied broadly to LIHA students.

Bergerson (2009) noted that research surrounding these models “weighs the predictive capacity of numerous variables in determining how and why students will make the postsecondary decisions they do” (p.46). Therefore, these models, as well as the studies on tuition costs, application fees, and personalized counseling have not studied why LIHA students choose to apply to selective universities but rather tested different variables that could possibly influence their choices since they appear to influence the college application choices of the general student population. Bergerson (2009) ends with the acknowledgement that:

Well-designed qualitative research is clearly needed that has the ability to fill in the knowledge gaps left by these quantitative studies, particularly related to how students of color and lower socioeconomic students engage in the process of deciding whether and where to go to college. (p.46)

My study sought to fill this gap by providing qualitative data that could help us better understand which variables LIHA students themselves identify as the most important when making the decision to apply to and ultimately enroll in a selective university.

Given that we know so little about why LIHA students choose to apply to a selective university, it made sense to use qualitative methods to ask LIHA students directly which variables influenced their application choices, rather than only studying countless variables with the hope of eventually finding one or more that appeared to influence that choice. Since broad applications of external stimuli to groups of LIHA students appear to have had little impact on these students’ choices of whether to apply to a selective university, it was reasonable to hypothesize that perhaps these students were

making their choices because of some variables other than those that had already been tested by previous researchers.

Conclusion

A lot of rich, detailed, qualitative data on why LIHA students decide to apply to selective universities are not available. Previous studies on the college choice process and college application decisions have been predominantly quantitative and have focused on the general student population rather than focusing on low-income or LIHA students. While yielding various models of the college choice process that differed mainly in their number of stages rather than specific findings, existing research studies have largely ignored low-income, high-achieving students and the variables that may influence their college application decisions.

In an effort to better understand why LIHA students choose to apply to selective universities, there was a need for a qualitative research study. Since existing research suggested that LIHA students are funneled away from selective universities during the application stage, it was important to focus on the search phase of the Hossler and Gallagher model, rather than beginning with an attempt to redesign the entire model. The current study provided LIHA students an opportunity to share why they chose to apply to a selective university, thus providing greater insight and understanding about their application and enrollment decisions and filling a significant gap in the literature.

CHAPTER 3

DESIGN AND METHODOLOGY

Methodological Approach

To understand the variables that influence low-income, high-achieving (LIHA) students' decisions to apply to a selective university, I used a qualitative, phenomenological interview approach with interpretative analysis. As a methodological approach, "phenomenology involves exploring, in depth, experiences or texts to clarify their essences" (Grbich, 2007, p.84) and is useful when the researcher wants to get a lot of rich detail about individuals' experiences with a phenomenon, as well as how participants make sense of their experiences.

Using an interpretative phenomenological analysis means that the researcher studies a phenomenon that is of personal significance and is usually a major life event for an individual. The researcher then uses an idiographic approach, meaning that the researcher focuses on gaining insight into how these particular individuals experienced a phenomenon and which variables were important during that experience, rather than attempting to formulate theories or laws that can be generalized to others (Smith, Flowers, & Larkin, 2009). Therefore, phenomenological studies that use an interpretative analysis approach are both descriptive and interpretative in that the researcher gathers participants' descriptions of an important event or phenomenon as they experienced it and then analyzes the content to uncover important information, such as

critical variables that led participants to make an important decision or specific choice (Pietkiewicz & Smith, 2012).

In this case, the phenomenon I investigated was LIHA students' decisions to apply to a selective university. I wanted rich detail about these students' experiences during the application process. It was interesting to know, for example, when they decided to apply, how they decided to apply (whether it was a spur of the moment decision or something they always knew they would do), and which variables they pointed to as most influencing their college application decisions. I then looked for themes that emerged as well as shared experiences to try to get to the essence of the application decision process for these students. Thus, phenomenology as a methodological approach was better suited for my study than other qualitative approaches such as a case study approach, which would be better suited for a study that investigated a particular group or culture over time (Glesne, 2011).

Site and Participant Definition and Selection

For this study, I reached out to the Jack Kent Cooke Foundation, which agreed to help me secure participants for my study. During a phone conversation, Dr. Jennifer Giancola, Director of Research at the Foundation, agreed to help me locate LIHA students at selective universities (personal communication, October 23, 2014). To do this, after receiving Institution Review Board approval from the University of South Carolina (Appendix A), the Foundation forwarded my email invitations for participation in my study to students who received scholarships through the Foundation's College Scholarship Program, were eligible for Pell Grants, and were first year students at a selective university (see Appendix B). I considered first year students to be those

students who were either beginning their first year or who had just completed their first year. This definition offered flexibility in that it expanded the pool of potential research participants and gave me the opportunity to interview students who might be between their first and second years. According to Dr. Giancola, at the time of my study there were approximately 35 students who qualified for participation in my study. Students who were interested in participating were instructed to click a link in the email to complete an online form providing me with their names, university, and contact information.

Students who qualify for a college scholarship from the Jack Kent Cooke Foundation must meet several eligibility requirements:

- they must be recent high school graduates
- have a cumulative unweighted high school GPA of 3.5 or higher
- have standardized test scores in the top 15% nationally, which the Foundation notes is a SAT “combined critical reading and math score of 1200 or above and/or ACT composite score of 26 or above” (Jack Kent Cooke Foundation, “college scholarship program”, n.d.)
- must demonstrate substantial financial need.

According to the Foundation, it “anticipate[s] that a majority of scholarship recipients will be able to receive a Pell grant” (Jack Kent Cooke Foundation, “college scholarship program”, n.d.), which is a federal need-based grant for low-income students (U.S. Department of Education, 2015). The competitive scholarships award students up to \$40,000 per year to cover tuition, books, and other living expenses (Jack Kent Cooke

Foundation, “college scholarship program”, n.d.), which institutional scholarships or federal assistance may not fully cover.

Research Sites

The selection strategy that I used for my study was that of “criterion sampling” (Patton, 2002, p.243). That is, I chose my sites (as well as participants) because they all met specific criteria. In this case, I chose my sites because they were selective schools that LIHA students attend.

To define selective, I used *Barron’s Profiles of American Colleges* (2015), which ranks colleges on selectivity based on several factors including first year students’ average high school GPA, standardized test scores, high school class rank, and the percentage of applicants accepted for admissions. Barron’s then ranks universities as *most competitive*, *highly competitive*, *very competitive*, *competitive*, *less competitive*, or *non-competitive*. Other researchers who have studied the application behavior of LIHA students have used this guide as well, as it seems to be more consistent year to year than other guides, such as U.S. News & World Report (e.g., see Hoxby & Turner, 2013; Wyner, Bridgeland, & DiIulio, n.d.). All of the participants in my study were enrolled in a university ranked as *most competitive*, Barron’s highest level of selectivity. In total, I interviewed 10 LIHA students from 5 different selective universities: Harvard, Yale, Duke, Vanderbilt, and Stanford.

Participant Selection

Just as with my site selection, I selected my participants using “criterion-based” sampling (Patton, 2002, p.243). That is, my participants were all Pell Grant-eligible and Jack Kent Cooke Foundation scholarship recipients, which means they were students who

were LIHA. The participants were students who were currently in their first year or had recently completed their first year at a university ranked as most competitive by Barron's. Students who did not meet those criteria were not included in my study. I focused on first-year students instead of sophomore, junior, or senior students, as they could potentially have a better working memory of what their college application decision process was like.

Sample Size

According to Patton (2002), “there are no rules for sample size in qualitative inquiry” (p.244), as generalizability is not one of the goals of qualitative research as it is with quantitative research. Patton, a well-known and respected author in the fields of evaluation and qualitative research (Coffman, 2002), notes that the sample size in qualitative research depends on what one wants to know, the purpose of the study, as well as the consideration of available resources, including time. A small sample size that produces a great deal of rich, in-depth information may be much more beneficial than a larger sample size that produces less-detailed information. In fact, Patton notes “a qualitative inquiry sample only seems small in comparison with the sample size needed for representativeness when the purpose is generalizing from a sample to the population of which it is a part” (p.244).

According to qualitative researchers, the suggested number of participants for a phenomenological study ranges from 6-12 participants (Bryan, 2013; Creswell, 1998). Pietkiewicz & Smith (2012) note that phenomenological studies with an interpretative analysis approach are usually small and could have anywhere from one to fifteen participants, and that studies with larger sample sizes are uncommon. Of course, the

amount of rich, detailed-information I collected from each participant was more important than the final number of participants, as the goal was to get an understanding of how *these* students engaged in the application decision-making process rather than trying to generalize to all LIHA students.

After the Foundation forwarded my call for participants to its list of scholarship recipients, twelve students who matched my criteria indicated that they were willing to participate in the study. I then contacted students via email to set up an appointment for a telephone interview. Ten students responded to that email and set up times for an interview. I successfully completed 10 interviews during the summer of 2015 and each participant was remunerated with a \$25 Amazon.com electronic gift card at the conclusion of the interview, which I had offered in my invitation letter as a way to entice potential study participants. Ultimately, after 10 participant interviews, I reached saturation, which means that I was at a point at which no new substantial information seemed to be emerging (Kisely & Kendall, 2011) yet there were sufficient data available to address the study's research questions.

Saturation, of course, can be hard to define and raises the question, "How does one know when one has reached saturation?" In their discussion paper, *How Many Qualitative Interviews is Enough*, Baker and Edwards (2012) asked this question of more than a dozen qualitative researchers and the answer they ultimately reached was that it is highly subjective and depends on several factors. According to one of the researchers, Howard Becker:

Since there is no universal 'right place' to stop your research, where you decide to stop will be somewhat arbitrary, probably more the result of running out of time

or money or some similar mundane consideration than of some logical analytic procedure. You will just want to be sure that when you do stop, the interviews and observations you have and what you want to say coincide, your data supporting your conclusions and your conclusions not going beyond what your data can support. (p.15)

Other researchers in the paper offered similar insights, noting that some other factors that may influence one's finding of having conducted a sufficient number of interviews may include the ability or inability to find a significant number of additional participants for the study or reaching a number that was agreed upon in a research proposal. Several of the researchers also cautioned against falling into the trap of trying to quantify participants and research results the way one might do for a quantitative study and, therefore, mistakenly believing that more participants means a better or more thorough study.

Tracey Jenson, another qualitative researcher, discussed her experience writing her dissertation and her fear that perhaps she should keep conducting more interviews. According to Jenson:

I also think it is perfectly normal to feel that you never have 'enough' interviews to make the research claims you want to make. Rather than asking the question, 'how many qualitative interviews *should* I do', my advice would be to ask instead: why do I feel like these are not enough? Once my supervisor asked me this question, she gave me permission to stop, to process and to take the time necessary to develop what I had into a project that I feel enormously proud of. (p.39)

During my research proposal, my committee and I agreed that I would interview between six and twelve participants. Therefore, after interviewing 10 participants, I had satisfied this requirement and had also interviewed all the potential participants who met my criteria and had agreed to participate in my study. I believe at that point that I had enough data to address my research questions without attempting to generalize the findings to the general population, which would not be the aim of a qualitative study.

Data Collection and Analysis

In order to collect my data, I interviewed the participants in my study using semi-structured telephone interviews. According to Glesne (2011), a qualitative researcher and educational anthropologist, semi-structured interviews allow researchers to ask specific questions that they want answered while still allowing for the possibility that researchers may need to ask new questions based on unexpected topics that might arise. Since existing research had not provided insight into why LIHA students apply to selective universities, a semi-structured interview allowed me to ask specific questions about students' application experiences while still being open to students bringing up issues that I had not considered.

According to Glesne (2011), "the opportunity to learn about what you cannot see and to explore alternative explanations of what you do see is the special strength of interviewing in qualitative inquiry" (p.104). According to researchers who have studied phenomenological research studies with an interpretative analysis approach, interviews are usually semi-structured, last for one hour or more and focus on allowing the interviewer to collect first-hand experiences from the participants (Pietkiewicz & Smith, 2012). My research study followed these same guidelines for data collection.

Other researchers, who have performed similar studies in this area, including Levine and Nidiffer (1996), used interviewing as the main data collection method as well. This allowed the researchers to collect rich data about the participants' experiences. However, in the case of Levine and Nidiffer, the authors focused on how the poor overcome obstacles to get to college, rather than focusing on application behavior or selective universities in particular. Finally, Grbich (2007) also notes that interviewing those with first-hand experiences of the phenomenon under investigation is a useful way of collecting data in phenomenological studies but that one should use a "non-structured manner so that initial responses to open-ended questions lead you and your respondent in the direction of the respondent's experiences" (p. 88).

Development of Interview Protocol

When creating my study's interview questions, I used Hossler and Gallagher's (1982) college choice model as a framework for the interview protocol (Appendix C). The Hossler and Gallagher model views college choice as a three-phase process. The process begins with a student's decision whether to attend college, followed by the college application stage and ending with the third and final stage, when students decide where they will ultimately matriculate.

Although other models of college choice exist, the Hossler and Gallagher model is a well-known model that has been studied extensively and in which many facets of the college choice process have been condensed into a comprehensive yet simple and easy to understand three-stage model. Therefore, I divided my interview protocol into three stages as well, asking students to share their experiences surrounding their initial decision to attend college, their college application experience, and their ultimate decision to

matriculate at one university instead of another. Although my interview followed a semi-structured style, I did ask students specifically about the variables that the Hossler and Gallagher model describes as influencing students' college application decisions, including financial aid availability and the recruitment efforts of different universities.

As I interviewed each participant, I audio-recorded the conversation, with each participant's consent, and took manual notes as well. Each interview lasted around one hour, with the longest being one hour and sixteen minutes and the shortest being forty-nine minutes. After each interview, I manually transcribed our conversation to begin the data analysis and coding procedures. In qualitative analysis, coding refers to looking for relationships and themes within the data (Glesne, 2011).

Telephone Interviews in Qualitative Research

Since the students who participated in my study were in many areas of the country, it was more cost-effective and practical for me, as well as the participants, to conduct my interviews via telephone calls. Furthermore, since this was a study of low-income students, I was unsure if all the potential participants would have access to technology to allow them to conduct video interviews. Although some researchers may suggest that conducting interviews via telephone rather than in person may result in a loss of visual cues and other non-verbal data, an analysis of research on the use of telephone interviews in qualitative research suggests that the use of telephone interviews provides many benefits including: decreased costs; increased safety for both participants and the interviewer; and the fact that telephone interviews allow participants to engage in research from their preferred environment, which may make them feel more comfortable

discussing sensitive topics and therefore more likely to disclose more information (Novick, 2008). In fact, Novick found that:

The apparent assumption that face-to-face interviews are superior to telephone interviews may stem from a legitimate concern that lack of visual cues could lead to data loss or distortion. If these losses occurred, data analysis and interpretation might be affected, harming the quality of research findings. Yet, there is little evidence that data loss or distortion occurs, or that interpretation or quality of findings is compromised when interview data is collected by telephone.

(“Discussion”, para. 1)

Other researchers comparing the use of telephone and face-to-face interviews in qualitative research have reached similar conclusions. A 2004 article in the journal *Qualitative Research* compared the quality of interviews collected in person versus those collected via telephone in a qualitative study and found no significant differences, with the study’s authors concluding that “telephone interviews can be used productively in qualitative research” (Sturges & Hanrahan, 2004, p.107). Carr and Worth (2001) noted that “studies which directly compare telephone and face-to-face interviewing tend to conclude that telephone interviewing produces data which are at least comparable in quality to those attained by the face-to-face method” (p.511).

Data Analysis

After the completion of each interview, I manually transcribed the audio recording. After transcribing the interview, I re-read the text of the conversation and began the process of summarizing and open-coding, which is when the researcher looks for concepts and themes that begin to emerge and that can be categorized (Grbich, 2007).

When analyzing data in phenomenological interview studies, one reviews transcripts of interviews and looks for meaning in participants' statements, major themes that emerge, and participant descriptions of their experiences (Bryan, 2013). During data analysis in an interpretative phenomenological study, the researcher begins by reviewing the transcripts of each individual interview and looking for themes on a single-participant level before looking for common themes among all the study participants (Smith, 2004).

In these kinds of research studies, "meaning lies in the identification of the dominant themes in the encounter between you and your participant through a light form of thematic analysis where the data are kept largely intact" (Grbich, 2007, p. 88). Since I did not know which variables LIHA students would identify as the most salient in their college application decisions, I did not begin my data analysis with pre-defined codes and instead focused on themes that emerged on an individual and then collective level.

As I began my data analysis of the audio transcriptions, I created a codebook and as I completed each interview, I added new codes and compared the codes from new interviews with codes from previous interviews to look for patterns and subjects that could be grouped into major themes or sub-themes. After my initial analysis of all the completed interviews, I then followed-up with each study participant to complete a member-check, which I discuss further in the section on trustworthiness.

Methodological Considerations

Role of the Researcher

When I began my doctoral program and started reading more about LIHA students, I found the topic fascinating. However, I noted that much of the research focused on barriers that LIHA students face. For example, I read how LIHA students

often lacked information about selective universities and how they could not afford tuition or basic living expenses. However, as someone who has taught at both a technical college and four-year university, I have always tried to focus on the positive aspects of students and their potential for success. Thus, instead of designing a study that continued to focus on the problems and barriers that LIHA students face, I wanted to design a study that focused on students who were able to overcome barriers and successfully enroll in selective schools. This way, I could focus on successful students' experiences and, perhaps, a potential solution to the problem of LIHA students not applying to selective universities rather than different aspects or explanations of the problem.

When I designed my study, I only knew a few specifics about my study participants. For example, they could be male or female, from many different ethnic backgrounds, and geographical locations. However, I did know that they would be traditional, college-aged first-year students who were low-income and high achieving academically and had received a scholarship to attend a selective university. Although I was older than the participants, I do not think they believed me to be so old that I could not relate to their experiences of applying to college (after all, I am currently a student as well).

I did not have an existing relationship with my study participants and held no power over them. Because these students are high achieving and at selective universities, I knew it was likely that they would be participants who value education. This may have helped me gain some kind of insider status and build rapport, as participants might have viewed me, in my position of academic researcher and doctoral student, as someone who values higher education and the experiences of students like them. Also, since the study

participants learned about me and my study through the Jack Kent Cooke Foundation, who had awarded them scholarships, they appeared to trust me as a researcher who was legitimately interested in learning more about their experiences. I believe this connection greatly enhanced participant trust in me and helped build rapport. As I am the data instrument in a qualitative study, such rapport may have encouraged the participants to disclose detailed information during our interviews.

Trustworthiness

I employed several methods to safeguard the trustworthiness and rigor of my data. First, I planned to boost the credibility of my study with my interview technique. Krefting (1991) points out interviewing can enhance credibility when interview questions are internally consistent and “when there is a logical rationale about the same topic in the same interview or observation” (p.220). It made sense to keep my interview questions consistent so that I could boost credibility by demonstrating that with all participants I was attempting to study the same phenomenon.

As previously noted, I also used member checking in my study. Member-checking is a widely-used method of increasing the validity of qualitative research findings by allowing study participants to offer feedback to researchers about their data and study findings (Maxwell, 2013; Merriam 2002). After I completed all the interviews and had developed a list of major themes, I emailed study participants individually and offered each participant a summary of our interview along with my interpretation of what each participant shared with me. This allowed participants to offer feedback, answer follow-up questions, and make any corrections if participants believed my interpretation of our conversation was not correct. However, during the member-checking phase of the

study, there were no major changes or corrections to make, with participants telling me that my summaries and interpretations of findings appeared accurate. By giving study participants this opportunity, I can be more confident that my findings genuinely reflect what students wanted to share, which boosts trust in my study.

Finally, during this study I made use of peer examination. Peer examination, like member checks, allowed me to share my data with others for feedback. Unlike member checks, though, peer examination makes use of colleagues who are familiar with qualitative research. By using peer examination, the colleagues with whom I shared my data and findings were able to offer their own interpretation of the data, comment on my interpretation, and could point out major themes that I may have overlooked in my initial analysis. Like member checking, peer examination is another tool qualitative researchers may use to increase internal validity (Merriam, 2002).

Ethical Issues

In my study, I interviewed low-income students. Since there is often a stigma associated with coming from a lower socioeconomic background, I needed to broach the topic in a sensitive, professional, and nonjudgmental way. Of course, I did not want to address topics that could have been emotionally upsetting to participants. To address this issue, I made clear in my invitation to participate that the interview would focus on the college application decisions of students who were both high-achieving and from a low-SES background. Therefore, students who were not comfortable discussing the topic could avoid volunteering for participation. Having full disclosure about what my study was about and how I would use the data could make students more comfortable and more

willing to participate and could allay any anxieties they had about what I would do with what I learned.

Because the issue of poverty is a sensitive one, I also assigned participants a pseudonym to protect their identities. By assigning pseudonyms, I could not only help protect participants' privacy, but also help them feel more comfortable during the interview and, therefore, perhaps be more willing to share more detailed information.

Finally, I took several steps to safeguard the data I collected on the study participants. I kept all data, including written, digital, and audio files in safe locations that only I could access and used technology to protect files with encryption and complex passwords. Doing so helped protect participant confidentiality and minimized the risk that unauthorized individuals could access participant data.

Risks and Benefits

In my study, there was little risk of harm to participants. Because of the semi-structured interview format that I used during my study, it was possible that participants could bring up topics that I had not considered. Some of the issues participants could have brought up could have been sensitive and perhaps embarrassing for participants. Because of the semi-structured style of the interview, though, I would have been able to change the topic if I had felt that it was emotionally distressing to the participant. However, this was not necessary during the interviews, and participants seemed comfortable and willing to speak openly with me. Of course, the participants also had the right to stop the interview at any time and/or withdraw from the study. However, no participants chose to withdraw from the study or to end the interview early. Therefore, I believe there was no great risk of harm to the participants.

On the other hand, participants had a great opportunity to help others. Through participant interviews, I was able to understand why these LIHA students applied to a selective university. Therefore, one intellectual benefit for scholars in the field of education is a better understanding of these students' decision-making processes. Similarly, it is possible that selective universities could use the findings of the study to recruit more LIHA students, which would be beneficial for both the students and the socioeconomic diversity of the university. Thus, there was a great potential for the study to benefit others while posing little risk to participants.

Limitations

For this research, I studied LIHA students who applied to a selective university. Since previous attempts to increase the number of these students who apply to selective universities have been largely unsuccessful, this study provided a great opportunity to learn more about why these students decided to apply to a selective university when so many of their peers do not. However, this study did not provide me with an opportunity to hear from LIHA students who did *not* apply to a selective university.

One cannot assume that the reasons why some LIHA students apply to a selective university are similar to the reasons why other LIHA students do not apply. In short, the reasons why a LIHA student decides to apply to a selective university may be vastly different from the reasons why a LIHA student decides not to apply. Therefore, there is a need for further research into LIHA students who could have applied to selective schools but chose not to do so. This kind of study would help fill significant gaps in existing literature.

Significance of Contributions

This study is especially important given that researchers understand so little about the application decision-making processes of LIHA students. Intellectually, such a study offers scholars a better understanding of how these students make sense of their decisions to apply to a selective university. This fills a gap in the existing literature, which suggests that LIHA students generally do not apply to selective schools but does not provide any insight into the application decision-making processes of these students or any insight into the variables that these students identify as being influential in their application decision.

On a practical level, if selective universities understand why LIHA students decide to apply to their schools, it may be possible for the institutions to recruit more of these students. Thus, this study has the opportunity to lead not only to a better understanding of the students' application decisions but may have real-world policy implications for universities as well. The study's major findings are discussed in further detail in Chapter Five.

CHAPTER 4

RESEARCH PARTICIPANTS

For this study, I interviewed 10 traditional-aged low-income, high-achieving (LIHA) students who applied to, were selected, and ultimately enrolled in a selective university. The students came from five different universities, each ranked as a most competitive university by Barron's: Harvard, Yale, Stanford, Vanderbilt, and Duke. All 10 participants were enrolled students at the time of the interview, with 8 participants about to begin their first year and 2 participants having just completed their first year. Of the 10 participants, 6 were female and 4 were male. Second year students were included in the pool of potential students simply to maximize the number of possible interviewees.

Table 4.1 offers the reader some quick information about participants, including their pseudonyms, sex, university where they are enrolled, if they are first-generation college students, their home states, and their ethnic backgrounds. More detailed descriptions of the participants follow the table. Participants' names have been replaced with pseudonyms to protect their confidentiality and the descriptions of participants are in alphabetical order based on those pseudonyms. Descriptions of participants' universities follow the participant descriptions.

Participant Descriptions

Andrew

Andrew, who just completed his first year at Harvard University, went to high school in Colorado, spending one year at a public high school and the following three years at a small, private high school. Andrew told me that he was able to attend a private high school because of a scholarship he received. Academically, Andrew was a strong student in high school and knew he wanted to attend a selective university because of these schools' reputations for academic excellence and generous financial aid packages

Table 4.1
Characteristics of Participants

Participant	Sex	University	Home State	First generation college student?	Ethnic background
Andrew [†]	M	Harvard	Colorado	No	White
Emily	F	Yale	Florida	Yes	Asian
Gabriela	F	Harvard	Texas	Yes	Hispanic
Lily	F	Harvard	Texas	Yes	Hispanic
Lucas	M	Harvard	California	Yes	Asian
Mario	M	Vanderbilt	Florida	Yes*	Unknown
Olivia	M	Yale	Oregon	No	Asian
Robert	M	Duke	South Carolina	Yes*	Asian
Sophia [†]	F	Stanford	New York	No	Asian
Tina	F	Harvard	Georgia	No	African-American

* First generation to attend college in the United States

[†] Student was a rising sophomore at time of interview

Growing up, Andrew said that there was never a question of whether he would go to college but rather which college he would ultimately choose. Andrew told me that both of his parents went to college but that when he was younger, his father lost his job due to illness and his parents later divorced. According to Andrew, by all accounts he should have been in a higher income bracket because both of his parents went to college and worked. However, his father's illness and parents' divorce hurt the family financially. When he applied to college, Andrew said that his family's annual income was less than \$20,000 per year for a family of three, including Andrew, his mother, and his sister.

Andrew applied to Harvard's Early Action program and learned of his acceptance about a month later, surprisingly, on Friday the 13th. Andrew is majoring in the history of science and art, with a minor in German. After college, Andrew said that he would like to study abroad, earn his Master's and Ph.D., and perhaps teach at the university level.

Emily

Emily, a first year student at Yale University, is a first-generation college student originally from Florida, where she attended a public high school. Emily told me that she is an only child and that her family is from South Korea and she moved with her family to the United States when she was two years old. Emily said that she always wanted to go to college but began seriously investigating different colleges during her senior year of high school. When I asked Emily about her family's income, she told me that she was not sure how much it was.

Emily told me that she wanted to attend a university that had a reputation for academic excellence and so she looked at several schools, including those in the Ivy League. Emily told me that she knew a student from her high school who was at Yale and that it was comforting to know someone who was already at the university. That same student served as a representative for Yale and came back to her high school to talk to other students about Yale and the opportunities there. Since Yale was Emily's top choice, she applied early to the school and was accepted. Emily plans to complete the pre-med program at Yale, perhaps double-majoring in biology and English. After graduation, Emily would like to go to medical school and eventually become a surgeon.

Gabriela

Gabriela, a first year student at Harvard University and a first generation college student, is originally from San Antonio, Texas. Gabriela's parents moved to the United States from Mexico and do not speak English. Gabriela excelled academically in high school, though she said that she had to sacrifice some of her social life due to her job working part-time in a nearby medical school's laboratory conducting breast cancer research. When she applied to college, Gabriella told me that her family's annual income was less than \$20,000 per year.

Gabriela said when she began seriously thinking of where to apply to college, she wanted to find a place that would offer lots of undergraduate research opportunities. Gabriela applied to Harvard's early action program and was accepted. Gabriela told me that she wanted to go to a school that had strong public policy and government programs and that visiting Harvard during an organized weekend event convinced her that Harvard was right for her. Although she had not yet declared a major at the time of our interview,

Gabriela hopes to go to law school and said that she is considering both political science and anthropology as possible majors.

Lily

Lily, a first generation college student, is a first year student at Harvard University. Originally from Houston, Texas, Lily attended a private middle and high school specifically for low-income students, where she excelled academically. During her junior year of high school, Lily did a semester-long program at the School of Ethics in Global Leadership, in Washington, D.C., and several of the staff members were Harvard graduates. Initially, Lily said that she did not want to go to Harvard because she felt that it was a place where she would not fit in. However, she was paired with an advisor at the School of Ethics in Global Leadership, who was a Harvard alumnus. Lily said that the advisor convinced her to apply for Harvard's early action program and that is how she ended up at Harvard. Lily mentioned that speaking with the advisor gave her a sense of courage and convinced her that there was a place for her to fit in at Harvard. Lily is currently studying folklore and mythology and in the future she would like to be a high school teacher.

Lily comes from a family of five, including her parents, an older sister, and an older brother. Her parents moved to the United States from Mexico. She was not able to give a specific amount, but told me that she knew that her family's annual income was below \$60,000 per year. Her two siblings also went to college, with one attending a state school at the time of our interview and another recently graduating from a private college in their hometown.

Lucas

Lucas, from Los Angeles, is a first year student at Harvard University. Lucas, a first-generation college student, moved to the United States from China when he was thirteen years old to live with his uncle. Lucas told me that he moved to the United States to have access to better schools and because he would be able to live with his uncle, who lived in California. Lucas shared that he did well in high school, both academically and socially, and he began to consider going to college during his sophomore year. According to Lucas, he had a close friend who had been admitted to the University of California, Berkeley. Lucas' friend talked with him and gave him tips and advice about what would help him get accepted to a prestigious university. After speaking with his friend at Berkeley, and another friend at the University of California, Los Angeles, Lucas applied to Harvard's early action program and was accepted.

Lucas said that he was happy to go to Harvard because he wanted to go to a school that was out of state and explore a new city. Although Lucas had not declared a major at the time of our interview, he told me that he hopes to have a future working in economics or government. Lucas was unable to give an exact salary amount, but noted that there were a total of three individuals in his household in Los Angeles and he knew their income was under \$60,000 per year.

Mario

Mario, a first year student at Vanderbilt University, is from Venice, Florida. According to Mario, he did very well academically and fairly well socially while in high school. He felt that he had a reputation for being a gifted student and that people realized

he was easy to talk to once they got to know him. Mario said that he always knew he was going to attend college but it was near the end of his tenth grade year when he met with an alumnus of Harvard through his school's college resource program. The Harvard alumnus told Mario some of the criteria for being admitted to a school like Harvard, from getting good grades to having meaningful volunteer experience. Mario said he knew that if he aimed to meet Harvard's admissions criteria that he would also meet the criteria of several other universities. Later, Mario met with other alumni from universities to which he applied, including Vanderbilt.

Before making his final decision regarding where he would attend, Mario toured Vanderbilt and met and spoke with some professors and students. Currently, Mario is an economics major and hopes to start his own business one day. Growing up, Mario said that his mother, who graduated from college in Canada, was a teacher and so he and his two younger sisters grew up with an understanding of the importance of education. According to Mario, even though his family did not have a lot of money growing up, his mother still took them to places where they could learn for free, such as museums and parks. Mario mentioned that his parents are not together and that he does not have a relationship with his father, who receives disability payments from the U.S. government. Mario was not sure about his mother's specific salary but said that it was under \$55,000 per year for their family of four. Unfortunately, I was unable to collect data on how Mario self-identifies in terms of ethnicity. I failed to ask Mario about his ethnic background during our interview and I did not receive an answer to my query when I sent him a follow-up email about it.

Olivia

Olivia, a first generation college student, is a first year student at Yale University. Olivia and her family of four moved to the United States from Vietnam when she was nine years old and she attended public schools in Oregon. Although she did well both academically and socially, Olivia said that her high school seemed more interested in getting students out of high school and straight into jobs rather than encouraging them to continue their education at a university. During our interview, Olivia told me that although she believed she could be happy at any college, Yale was always her top choice. Olivia shared that one reason Yale was her top choice was because during her junior year, a Yale representative came to her high school and enthusiastically talked about Yale and its strong programs. After listening to the Yale representative, Olivia mentioned that she would reach out to a high school friend who was attending Yale and would ask her questions about the university.

Although Olivia had not yet declared a major at the time of our interview, she said she is confident that she will graduate from Yale and looks forward to being able to travel around the world. Olivia told me that before taxes, her family earned a little under \$60,000 per year.

Robert

Robert, from Lexington, South Carolina, is a first year student at Duke University. Robert's parents went to college in Taiwan and his only sibling, an older sister, attended New York University. In high school, Robert felt that he excelled both academically and

socially. Robert took several AP courses, graduated with a near 4.0 GPA, and was also homecoming king during his senior year.

According to Robert, his family placed a lot of emphasis on the importance of education and getting good grades and, therefore, he has been thinking of going to college since he was in elementary school. Robert said that, “the thing about Chinese education is we place a lot of emphasis on grades, even in elementary school, which is kind of intimidating in my opinion, but that emphasis on grades motivated me to be on top.” Robert shared that he chose to apply to Duke based on his neighbor’s recommendation. Robert’s neighbor told him that Duke was a great school, had a great reputation, and had strong medical programs, which fit well with Robert’s career goal of working in the medical field, perhaps as a doctor. Finally, Robert shared that for his family of four, his total family income was around \$32,000 per year before taxes.

Sophia

Sophia, a first year student at Stanford University, attended a public high school in New York. Sophia did very well academically while in high school and although she said that she always knew she wanted to go to college, it was during her seventh and eighth grade years at middle school that she began seriously considering which colleges she wanted to attend. Sophia told me that when she began looking at colleges, reputation was really important, especially for scientific research, and so she began by looking at the Ivy League schools and branched out from there.

Sophia shared that she did not initially consider attending Stanford until a Stanford representative came and spoke to her high school. After hearing about

Stanford's great research culture and because of the generous financial aid she would receive from Stanford and the Jack Kent Cooke Foundation, Sophia decided that she would apply. Having just completed her first year at Stanford, Sophia says she is happy at the university. Although she had not yet declared a major at the time of our interview, Sophia said she planned to be either a physics or computer science major. Regarding her family, Sophia shared that both of her parents attended college, with her mother attending a college in South Korea and her father attending college in New York. Sophia told me that she was not sure what her family's income was at the time she applied to college, but that it was "pretty low."

Tina

Tina, an only child and a first year student at Harvard University, was originally from Macon, Georgia. Tina went to a public high school in Georgia where she excelled academically, eventually becoming her class valedictorian. Tina said that she always knew that she wanted to go to college but that she began seriously looking at schools when she was in the seventh grade. Growing up in a small, rural town, Tina said that she always wanted to get away and go to a bigger, more liberal city. Initially, Tina mentioned that she was going to apply to schools in Georgia but, after comparing herself with fellow students who were going to Georgia schools, she realized that she was outperforming these students and thought she should try to apply to more prestigious institutions. According to Tina, both of her parents went to college, although her father did not graduate. However, her mother has a Master's degree. Growing up, Tina told me that she spent half of her life with only her mother, as her father died when she was

younger. Tina shared that, after taxes, her total family income was around \$17,000 per year.

Eventually, Tina chose to apply to Harvard because it was far from Georgia and offered a wonderful financial aid package. Tina is currently a pre-med major at Harvard and plans to become a doctor. In the future, Tina would also like to work in some type of public policy position.

Participants' Cost of Attendance

For all participants in this study, the total family contribution toward the cost of tuition at their respective university was zero. Each of the selective universities mentioned in this study offers substantial amounts of financial aid to LIHA students. After a generous gift award that covers tuition, room and board, and necessary supplies, such as textbooks, most students are then expected to personally contribute to the cost of their education by completing student work on campus. However, the amount students must pay is generally low and can be satisfied through the use of other scholarships, such as a Jack Kent Cooke Foundation scholarship, so that students do not need to work. Here is a quick overview of financial aid at each of the universities included in the current study:

- **Harvard:** At Harvard, families who earn less than \$65,000 per year do not have to contribute any money toward the cost of their child's attendance. Students are then expected to work ten to twelve hours a week on campus to pay \$4,600 per year (Harvard University, 2017). However, outside scholarships can satisfy the entire personal contribution amount.

- **Yale:** Like Harvard, families earning less than \$65,000 per year are not required to contribute any money toward tuition expenses. Students are then expected to work on campus to pay a small personal contribution. The personal contribution amount for freshmen for 2016-2017 is \$4,475 (Yale University, 2017) and other scholarships can fully cover this amount.
- **Stanford:** Like Harvard and Yale, Stanford has a policy that parents with incomes below \$65,000 do not have to contribute anything toward the cost of tuition. Students are expected to contribute around \$5,000 through student term work or through the use of outside scholarships (Stanford University, 2017).
- **Duke:** At Duke, families with incomes under \$60,000 are not expected to contribute toward the cost of tuition. The student contribution for freshmen is \$2,600 with all financial aid applicants being award up to \$2,200 in work-study funding. Outside scholarships can cover the cost of the student contribution (Duke University, 2017).
- **Vanderbilt:** Unlike the other universities in the study, Vanderbilt does not advertise a specific income amount at which families have a zero contribution toward tuition. However, according to Vanderbilt: “The average financial aid package for first-year students entering in the fall of 2014 who were offered need-based assistance that included Vanderbilt funds contained 97% gift aid and 3% work” (Vanderbilt University, 2017, para. 4). The student work contribution for freshmen is currently \$1,350 (Vanderbilt University, 2017), although that amount could change in the future.

Participants' Immigrant Backgrounds

Although I did not directly ask participants in the study about their immigration status, eight of the ten students told me during the course of our conversations that they or their parents immigrated to the United States or that they had at least one parent who attended college in another country, although that does not necessarily mean that they were immigrants. Six of the ten students explicitly stated that either they or their parents immigrated to the United States. Four of these students' families emigrated from Asian countries and two of them emigrated from Mexico.

The fact that so many of the LIHA students had an immigrant background was surprising. Immigrant students are more likely to enroll in community or for-profit colleges than their native born peers and 55% of all immigrant undergraduates were enrolled in these schools during the 2003-04 academic year (Erisman & Looney, 2007, p.5). Therefore, many of the students I interviewed were successful not only in overcoming odds that are stacked against low income students but against immigrant students as well.

Participants' Descriptions of the College Selection Process

The students in this study all shared their experiences of the college application and selection process. These LIHA students could not identify a singular point when they decided to attend college, instead saying that they always knew that they wanted to go to college. However, when it came to the college application process, students pointed to several variables that influenced their decisions about where to apply, including the universities' reputation and strength of programs; some type of personal

connection to the university, such as knowing an alumnus of the university; financial aid availability; and their own standardized test scores. I discuss these results in greater detail in Chapter Five, sharing participants' experiences and their own words to help the reader get a better understanding of how these students describe the important variables that influenced their college application decisions.

CHAPTER 5

FINDINGS

Although some researchers have examined college choice and a relatively smaller group of researchers have studied the college application decisions of low-income students or high-achieving students, very few researchers have studied the college application decisions of students who are both low-income and high-achieving, with even fewer researchers focusing on low-income, high-achieving (LIHA) students at selective universities. The research that does exist on LIHA students at selective universities focuses on testing variables that could possibly increase the number of LIHA students applying to selective universities but has had limited success and has been mainly quantitative in nature. The current study examined how LIHA students themselves describe their college application experience and gave them an opportunity to discuss the variables that they considered most influential to them when deciding to apply to a selective university. My wish to investigate this phenomenon in the context of Hossler and Gallagher's model of college choice led to the current study.

For this study, I used qualitative research methods to gather data from one-on-one, semi-structured interviews with 10 LIHA students who applied, were accepted, and ultimately enrolled in a selective university. This chapter provides an overview of major findings and themes that emerged during the study. Throughout the discussion of findings, I include direct quotes from the study participants so that the voices of LIHA

students can be shared with the reader. A summary of findings and their implications follows in Chapter Six.

Overview of Findings

Based on the current research study, it appears that one cannot attribute a LIHA student's decision to apply to a selective university to just one variable. Although it would be nice to be able to point to one or two variables as the magic formula for increasing the number of LIHA students who apply to selective universities, it appears that most LIHA students make their college application decisions based on a number of variables and that it is a confluence of several of these variables that lead students to apply to and enroll in selective universities.

Although the LIHA students in the study had their own very personal journey to a selective university, there were several common variables that emerged in the data I collected. These common factors tend to fall under three broad categories: economic factors, academic factors, and sociological factors. One finding, related to LIHA students' high school locations, may be categorized as a geographic factor. These categories, which included variables such as financial aid, personal connections to a university, and the strength of academic programs, help give the reader perspective in understanding the multi-faceted decision-making process that led these LIHA students to apply to selective universities, the ways that selective universities attempted to recruit these students, and also a glimpse at some of the variables that emerged that did not appear to be influential in LIHA students' college application decisions.

Economic Factor

Financial Aid Availability as Necessary but Not Sufficient Factor

Perhaps one of the most interesting themes that emerged from this study was that LIHA students were often not as concerned about financial barriers and the availability of financial aid as one might assume. Although most students shared that they were concerned about the availability of financial aid to cover the costs of attendance at a selective university, financial aid availability was not a *top* concern and they were determined to make it to a selective university with or without the universities' financial assistance. Once these LIHA students became aware of the generous financial aid packages that most selective universities offer, the influence of financial aid on students' college application decisions was not as great as one might assume and financial aid availability was secondary to other influences, such as reputation and the influence of personal connections.

Robert, currently at Duke, did not mention financial aid during our discussion until I asked him about it directly. When we discussed financial aid, it seemed like financial aid was almost an after-thought for him when it came to his decision to apply to Duke and he stressed that Duke's reputation and the strength of its programs were the most important factors for him. I asked him if Duke's financial aid availability influenced his decision to apply and he told me, "Duke did offer me almost a full scholarship, so that was an important factor." However, Robert then followed that by stating that even without the financial aid he still would have applied and tried to attend Duke, possibly through the use of loans, but that Duke's financial aid package took away that pressure.

Lucas, much like Robert, did not consider financial aid to be a highly influential variable in his decision to apply to a selective university. For Lucas, having a personal connection to the university was much more influential in his decision to apply to and enroll at Harvard. Lucas told me:

Well, of the schools that accepted me, the financial aid packages are really, really similar. So, that was not a top concern of why I chose here. I think one reason might be how many people, how many current students I know. A lot of the other schools, I didn't really have a lot of people I could connect to before college started.

When I spoke with Mario about the influence of financial aid, he responded that he knew while in high school that a lot of top-tier schools were well known for their fantastic financial aid packages. When I asked him directly if the availability of financial aid influenced his decision about where he would ultimately apply and enroll, he responded, "Um, a little bit." However, he told me the availability of financial aid was not the most important factor in his application decision and that he would encourage other LIHA students who were considering where to apply to educate themselves more about the availability of financial aid and how it can reduce the net cost of attendance. Mario said:

I've talked to people before where I'm, like, you know- 'Hey, have you thought about applying to somewhere better than where you are applying to?' And they're like, 'No, I can't afford it' and I'll be like, 'I'm not going to ask you about your financial situation but go fill out a net price calculator and see if what you are saying about financial aid is actually accurate'. That sort of thing.

Much like Mario, Gabriela said that she was somewhat concerned about financial aid availability but that when she was in middle school she heard a lot about financial aid reforms and how many universities were offering generous financial aid packages.

Gabriela said that

I think I always thought about going to college but I mainly started thinking about it when I was in middle school, just after hearing about lots of financial aid reforms that a lot of institutions were implementing in their schools and that really got me motivated to just enhance my study habits and enhance the strategies I would use going into high school and seeing how that would maximize my chances of admission.

Thus, we see in this example that the availability of financial aid was an incentive for Gabriela to do well academically in high school. However, Gabriela also mentioned that, in the end, the availability of financial aid was not the most influential variable in her decision to apply to Harvard. After all, since Gabriela was aware of the generous financial aid packages that selective universities offer, she told me that, “I knew that if I applied to as many schools as possible that give a full ride then that barrier would be completely overcome by those factors.” Gabriela shared that she wanted to apply to and attend a university with a good reputation that had a strong public policy and government program and that although the availability of financial aid was important to her, the fact that she knew about the generous financial aid packages of selective universities meant that, in the end, the influence of financial aid availability on her decision to apply to one selective school over another was not as great as one might assume that it would be for a low-income student.

Lily, who currently attends Harvard, shared similar sentiments. Lily told me that she was aware that selective universities had generous financial aid packages for LIHA students and so that was not one of the most important factors when she decided where she would apply. Although she was concerned about financial aid availability, it was “not a top concern.” According to Lily,

I think that financial barriers were something I considered like, ‘Oh, this might be a problem’, but I don’t think I ever considered, ‘Oh, I’m not going to go, because, again, I think the idea was just so deeply entrenched in me that no matter what I had to go to college.

Olivia shared with me that, for her, financial aid availability was a factor that she considered when thinking about where to apply but that it was secondary to other influences. Olivia told me that what was more important to her were the people she would know at Yale and, therefore, the community she would have. Olivia knew that Yale offered great financial aid packages to LIHA students and so it was something she “considered” but it was not the determining factor in her decision to apply. Instead, Olivia said, she wanted to apply to and attend Yale because, “Yale is a great school with people who are really, really motivated and has a good environment that I’d like to be in.”

Sophia, like the other students, told me that financial aid availability was not a highly influential factor in her decision to apply to a selective university because she already knew that selective universities offered great financial aid packages. When I asked her if financial aid availability influenced her decision to apply to any of the four selective universities to which she applied, she responded that it did not because “my

expected family contribution to all four of those universities is zero.” What mattered most to Sophia, she told me, is that the university have a good reputation for its science programs.

Finally, Emily told me that for her as well, financial aid availability was something that she considered but did not believe to be one of the most important reasons why she chose to apply to a selective university. On her decision to apply to Yale, Emily told me that, “Part of it was financial, not every school has a financial aid package like the Ivy League does.” However, she continued by telling me that the school’s reputation and the strength of its academic programs were the most important factors for her in deciding where to apply and enroll. Therefore, while she was initially concerned about the financial aid package she would receive, it was not the most important factor for her and, she told me, she felt it was just something that all college students consider, regardless of the selectivity of the institution. As Emily put it,

‘Where there’s a will there’s a way’, that was kind of like the mantra that I had.

So, of course, I was kind of concerned but it was never something I saw as a huge obstacle. Plus, I feel like that’s something that all college students face. So, yeah, it was never really a hindrance but it was of concern.

For these LIHA students, financial aid availability was one of many factors they considered when deciding to apply to a selective university. However, it appears that because these students were already knowledgeable about the generous financial aid packages that selective universities offer, they considered other factors, such as the university’s reputation or personal connections to be much more influential in their decision to apply to one university instead of another.

Although most of the students with whom I spoke told me that they were concerned about the availability of financial aid, they also told me that they would have done whatever was necessary to apply to and enroll in their university of choice even if the financial aid had not been available. Of course, it is impossible to know for sure what these students would have done if there had been no such financial aid. However, the idea that the availability of financial aid would have had such little influence on LIHA students' college application decisions seems unlikely, as existing research by Jackson and Chapman (1987) and Schoenherr (2009), found that financial aid availability was important, with Schoenherr (2009) finding that it was the most influential variable when it came to high achieving students choosing a more selective or less selective school. Still, based on feedback from the LIHA students, although financial aid availability may have been one factor for them to consider when applying to schools, it may not have been the most important factor. Therefore, for selective universities that hope to recruit more LIHA students, it appears that generous financial aid packages may be necessary to attract these students who have concerns about the cost of attending but those financial aid packages may not be sufficient in themselves to encourage a LIHA student to choose to apply to one school over another.

Academic Factors

Reputation of University/Strength of Programs

One of the themes that emerged during discussions with LIHA students about why they chose to apply to a selective university was that of reputation. Specifically, students were aware that some universities were known for having high academic standards and strong programs in specific areas, such as biology or government and

public policy and that by attending those universities they could receive the top training in the fields that interested them. Some students also mentioned that name recognition was important for them or their families, even if they did not have a lot of detailed information about a specific university's programs. In the study, at least seven of the ten participants mentioned a university's reputation for academic excellence as being a decisive factor in their decision to apply to a selective university.

One student, Mario, mentioned that he decided to apply to Vanderbilt almost exclusively because of its reputation. During our interview, when we were discussing institutional characteristics, such as the size or location of the university, Mario remarked that he applied because of the "reputation, mostly" and that he "didn't care about any of the other [characteristics]" that I mentioned.

Similarly, Robert told me that reputation was the most important factor in his decision to apply to Duke. Robert told me that it was his neighbor who told him that Duke was a great school with a great reputation and that he wanted a school that was known for having a high-quality program in medicine. Robert said:

I really wanted to go to a college that was strong in biology or bio-medical sciences...or even engineering, like bio-medical engineering, that'd be fine, too. So, that was my number one requirement, actually. And then, their program has to be really strong.

Robert said he talked to his family and they all agreed that he "should pick a school that is really strong in medicine and so [he] picked Duke." The fact that Duke was only a few hours away from his hometown was an added bonus, Robert said, but not his primary

motivation for applying. The primary motivating factor, Robert told me, was Duke's reputation for having strong medical programs.

Much like Robert, Gabriela told me that the reputation of Harvard's academic programs strongly influenced her decision to apply there. Gabriela told me that she applied to Harvard because it "was the institution with one of the strongest public policy and government programs." However, Gabriella also mentioned that she believes the reputation and name recognition of Harvard and the Ivy League universities in general also influenced her decision to apply to Harvard. According to Gabriela:

I feel like it was a personal choice but I also think that, growing up, there was a lot of emphasis on the institution and, interestingly, this is a point I've never thought about before, but since my parents didn't go to college they don't know too much about the college application process. Of course, they've always heard of Harvard. They've always heard of these Ivy League institutions. So, maybe that's also a factor why I only, or I mainly, chose these schools because of that background I have.

Although another student, Andrew, did not mention a specific program, he understood, much like Gabriela, that Ivy League schools had a reputation for academic excellence and also for their generous financial aid packages. Andrew told me that he applied to Harvard because he knew that he was a strong student and that he "wanted to go to a very good institution because of the academic excellence that they provide and also because of the excellent financial aid packages they have for students."

Another participant, Sophia, agreed that the overall reputation of the university was important and that she wanted to go to an institution that offered good research opportunities. According to Sophia, people often told her that, “Stanford [was] a great research school for [her] to consider.” Sophia told me, “I wanted a good reputation, especially for science and Stanford had that. I guess I wanted that the most.” Sophia said that she was motivated to apply to Stanford after a Stanford representative visited her high school and talked to the students about Stanford and its reputation for high-quality research opportunities. “Wow, this is a great chance”, Sophia told me she thought, “They have a great research culture there.”

When deciding where to apply, some of these high-achieving students also mentioned the desire to attend a selective university that had a reputation for challenging students academically. For example, Lily told me that she knew Harvard had a reputation for its challenging curricula and that she could learn and grow there. “I think other universities would have been like going to high school for another four years”, Lily told me, “whereas Harvard, I saw it as a place that would be challenging for me.” Similarly, Emily told me that she applied to Yale because of its reputation for academic excellence. Emily said, “I think the most important [factor] was academics. For me, academics was the number one priority. So, what I was looking for the most was academic excellence and their rigor and their reputation.” Although Emily knew she wanted to apply to a university with a reputation for academic excellence, she researched schools to learn more about their reputation for specific programs as well. According to Emily:

I kind of researched who had really good humanities programs and who had very good science programs, because I know that there are some schools that specialize in either-or, or are more well-known for either one of those departments.

Throughout the study, participants stressed the importance of a selective university's reputation for academic excellence as an influential factor in their decision to apply to that school. Although some participants mentioned specific programs at selective universities, others revealed that the reputation and name-recognition of the university was an influential factor in itself. As Emily told me:

I feel like a lot of time everyone says don't base a college by the name with something that's really important. But, in my first preliminary rounds of me kind of looking at colleges, a lot of it was basically a lot of that.

According to findings by Hossler and Gallagher (1987), the perceived quality of an institution can be an influential variable in the decision of students in general to apply to a specific university. Therefore, it may not be surprising to learn that these LIHA students also consider the perceived quality and reputation of a university as significant factors in their decision to apply to a selective university.

Standardized Test Scores

Another theme that emerged during the study was the influence that LIHA students' standardized test scores had on several students' decisions to apply to a selective university. For several of the students with whom I spoke, their standardized test scores gave them confidence to apply to a selective university. Whether the students took the SAT or ACT did not seem to matter but receiving high scores on either or both

appears to have given these LIHA students a boost of encouragement. This supports existing research that has found that students tend to apply to more selective universities as their SAT or ACT scores increase (Cabrera & LaNasa, 2001; Davies & Guppy, 1997).

Robert told me that his SAT score helped him make the decision to apply to a selective school:

[Test scores] had influence because I knew that for a lot of the big schools, 2200 was at least average so I knew I was at least around average, so that helped me decide to go ahead and give it a shot and apply to those schools. So, I guess it made me feel more confident, so that was a factor.

Like Robert, Lucas told me that he took the SAT several times and that his increasing score influenced his decision about where to apply:

I took the SAT two times and the first time I didn't do so well and so I thought I'd just go to a state school but then I thought I'd take it again and I got my score back and then I think it was better and so I thought I'd give other schools a try.

Mario took both the SAT and ACT several times and, like the others, felt that his scores gave him confidence to apply to selective schools. Mario told me:

I'm actually not too happy with my SAT scores. My highest I ever got was a 2120. I think it's like 710 for math, 720 for reading, and 690 for writing. My highest for writing is probably 700. That score was in December of my sophomore year. But, I just got tired of the SAT. I just didn't think I was doing well enough on it. By comparison, around the same time I got a 33 on the ACT

so I was like, ‘Now we are talking’. So, I retook that and then September of my senior year in high school I got a 35.

When I asked Mario if his increasing scores influenced his decision to apply to a selective university, he told me, “Yeah, I mean I guess that ACT score gave me some confidence to apply to the schools I applied to.”

Similarly, Andrew told me that his scores influenced his application decisions:

When I got my scores back they were good scores. Good enough that I knew I had a strong application for any school that I wanted to go to and so I said, “Good, I can definitely apply to the top level schools that I would like to go to.”

Finally, Emily shared that her test scores helped give her some extra confidence, especially since she had done some research to gain a better understanding of the average scores of students at different schools. Emily told me:

Getting my test scores, it was kind of like somewhat-a sigh of relief-that at least I was in the right range to be applying to these universities. I would look up some statistics that would always list every school, so it was a little-it was comforting to know that I was at least in that range that they were looking for.

For these five LIHA students, it is clear that doing well on standardized tests helped give them a measure of confidence and was an influential factor in their decision to apply to selective schools. However, this could also be a problem for other LIHA students who are on the fence when deciding whether to apply to a selective university. Selective universities generally do not rely heavily on standardized test scores to determine if students should be admitted (Ritger, 2013). Speaking to *USA Today*,

Marilyn McGrath, Director of Undergraduate Admissions at Harvard, said that “Generally speaking, the SAT is not very important” (Ritger, 2013, para. 3) and Christoph Guttentag, Dean of Undergraduate Admissions at Duke, agreed saying that the SAT was “not terribly important” (Ritger, 2013, para. 8). Therefore, while their standardized test scores served as confidence boosters for these LIHA students, selective universities may need to do a better job of informing students that their test scores do not hold as much weight as they may think. By putting the importance of test scores in perspective for students, selective universities may be able to recruit more LIHA students who were considering applying but were discouraged by their SAT and/or ACT scores.

Sociological Factors

Influence of a Personal Connection

Another major theme that emerged during the course of this study was that the majority of LIHA students with whom I spoke identified someone in particular who encouraged them to apply to a selective university. This was not necessarily a “personal connection” in the sense of having a close relationship with another, but rather in the sense of meeting someone who could help LIHA students put a name and face with a university. For some students, this was a neighbor or a friend. For others, it was because they met a representative from a selective university who visited their high school and spoke about the institution. Regardless of the relationship, most students I interviewed stressed to me the importance of knowing someone who spoke highly of a certain university, told them more about admissions requirements, or simply made them feel like they would fit in and be comfortable at a selective university. For these students, having some sort of personal connection to the university by way of a friend or acquaintance

who was already familiar with it was highly influential in their decision to apply to a selective university.

Robert, for example, told me that even though his number one requirement when deciding where to apply was that the university needed to have a strong biology or medical program and a good reputation, it was his neighbor who actually put Duke on his radar as a possibility. Robert told me, “I chose Duke based on my neighbor. My neighbor was talking to me and really told me it was a great school and had a great reputation.”

Other students pointed to close friends who influenced their decision to apply to a selective university. For these students, their friends were also students who had applied to and ultimately enrolled in a selective university themselves. Lucas, for example, told me that he knew four or five Harvard students while he was in high school. Lucas shared that he won a scholarship during his sophomore year and the company that awarded him the scholarship also offered camping trips and other events throughout the year. During those events, Lucas met students who went to various schools, including Harvard, where Lucas ultimately enrolled. One of Lucas’ friends enrolled at UC Berkeley and advised Lucas on how to get into a selective university. Lucas told me:

By the end of my sophomore year I had made a great friend who was a senior and he had recently been admitted to UC Berkeley and so after he started going to UC Berkeley I connected with him. I was advised that I should do well academically and he told me to join different groups and volunteer. And he told me what would help with college admissions and so I applied early to Harvard and was accepted.

Lucas told me that the friends he knew not only gave him advice about how to get into a selective university but also talked to him about what life was like after getting in.

According to Lucas:

I knew someone who went to Berkeley and someone who went to UCLA and they were like, 'Oh, we are having a good time' and so it just sounded like something I should do. I just felt like it was going to be a natural transition and I wasn't really thinking about the money or the financial stuff. I talked to a lot of students in the Los Angeles area who went to college and then they were like freshmen and sophomores and they were just telling me...they went to the same high school as mine and they encouraged me to apply to great schools and I think the people I met really influenced my decision about where I wanted to apply.

Like Lucas, who met students at selective universities through scholarly activities, Lily met several Harvard alumni during a semester-long program she did during her junior year of high school. Specifically, during her junior year, Lily completed a program with the School of Ethics in Global Leadership (SEGL) in Washington, D.C. and several of the teachers and advisors there were Harvard graduates. Lily told me that at SEGL:

They paired us up with an advisor and they were supposed to meet up with you for an hour once a week and you just chat about life and how you are adjusting and just general things. My advisor was a Harvard grad and he was immediately very drawn to the idea of me going to Harvard. We often joke that we're the same person and he essentially talked to me about Harvard.

When asked about what she and her advisor discussed during their meetings, Lily told me:

[My advisor] was really fundamental in telling me more about what college can be like, what you do in college, and then it was just about pushing me to apply and he convinced me and I applied early, for early decision.

Lily told me that because of the people she met at SEGL, and their friends, she felt that she would be supported if she went to Harvard. Lily mentioned that:

I had the knowledge that two of my teachers' friends at SEGL, the semester program I did, were going to be living in Boston and they were both Harvard grads and they were both really excited and they were really ready to show me around and help me in any way I needed.

Lily also told me that, "I think what did it for me was knowing a lot more about Harvard and feeling that if I went to Harvard, I already knew some people."

Like Lily, Olivia had a friend who went to Yale and would answer questions for Olivia about Yale or connect her with others who could better help answer her questions or address her concerns. According to Olivia:

I had a mutual friend who went to Yale and so I'd message her on Facebook and talk to her personally. She was passionate about it and all into it and she was like, 'Well, here's a friend who might be able to answer it' and I think I asked more people about [Yale] than just getting on websites.

Olivia also pointed to the influence of another personal connection to Yale. Besides having a friend who went to Yale, Olivia also discussed the importance and influence of having a representative from Yale visit her high school and speak with the students. Olivia shared that the representative and the way she talked about Yale helped her make her decision to apply. Olivia told me:

I think I decided during my junior year because this woman came to talk to the students about going to Yale and applying there and she was really enthusiastic about the school and she was talking about different programs and I think that the way she talked about it, like the library, there's math, there's humanities, many different things that I could do.

So, in Olivia's case, we see that not only could close friends and personal acquaintances influence the decision of these LIHA students to apply to selective schools, but that representatives from a selective school could also have an impact.

Mario, a student at Vanderbilt, shared a similar experience. According to Mario, while he was in high school he met with an alumnus of Harvard through his school's college resource program. The alumnus talked about Harvard with high school students and Mario told me that during his sophomore year he met with this representative and:

I asked him about what's actually required to get into a school like that and we had a really long conversation about everything from, you know-the whole concept of, 'Well, you have to get good grades' and 'You need to do meaningful volunteer work and get national recognition and awards and competitions' and things like that. So, that kind of gave me some focus and I didn't-I wasn't super-

bent on going to Harvard, like in a very specific way. I just said that because I was using it as a standard. I knew that if I shot for what Harvard requires for admissions then I'd obviously be nailing the admissions requirements for a lot of different schools and I couldn't go wrong by setting that bar. So, I kind of went from that perspective.

Therefore, we see from this example that a representative from a selective school could help LIHA students feel more confident in applying to selective schools, even if the students did not ultimately enroll in the representative's school

Sophia, currently at Stanford, also described the influence of personal connections, including both friends and a Stanford representative who visited her high school. Sophia shared with me that she knew several peers in high school who were accepted to Stanford and through them she met some Stanford upper-classmen and through her talks with them she realized that Stanford would be a "great fit". However, Sophia also shared that she did not initially consider applying to Stanford until a Stanford representative visited her high school and spoke with students there. According to Sophia:

Once I started looking at colleges, I actually didn't consider Stanford until a Stanford rep came to my high school and I was like, 'Wow, this is a great chance. They have a great research culture there. I might as well apply there'. That's actually how I ended up applying there.

Emily, currently at Yale, also pointed to the importance of having a personal connection at Yale in her decision to apply to the school. During our interview, Emily

mentioned that in high school she was on the track team and had a teammate who applied to and ultimately enrolled at Yale. Emily mentioned that she also had another friend who had been accepted to Columbia University. Emily said that it was nice knowing others who were at selective schools and who could help answer questions for her about the application process, such as questions about the essays that were required with her application. Interestingly, Emily told me that her friend and former teammate is “part of a program that actually sends current Yale students to high schools around America, normally to their hometown” to talk to high school students about Yale and applying to Yale. Therefore, Emily’s friend may encourage many future LIHA students to apply to Yale or some other selective university.

Through discussions with these LIHA students it became clear that many of them decided to apply, at least in part, because of the encouragement of a personal connection, whether it was a close friend, neighbor, or even a representative from a selective university. Some of these students shared that it was helpful understanding the admissions requirements of selective universities, while others said that it was comforting just knowing that someone they knew would be at the university and could help them if they needed anything.

For some students, it was encouraging just to hear someone speak to them about the great reputation or culture of a university. Regardless, it is evident through my discussions with these students that for many of them, personal connections, whether through friends, neighbors, teammates, or university representatives influenced their decision to apply to a selective university.

Role of Guidance Counselors and Parental Encouragement

Guidance Counselors

During my review of the literature for the current study, one topic that researchers often discussed was related to the perceived influence of guidance counselors, teachers, or parental encouragement in the college choice decisions of high school students. For example, Hoxler, Braxton, and Coopersmith (1989) as well as Conklin and Daily (1981) found that students were much more likely to attend a four-year university if they reported high levels of parental encouragement. Similarly, Levine and Nidiffer (1996) as well as Radford (2013) noted that students often were disappointed with the quality of guidance counselors and would therefore turn to family members as a source of information or influence when making their college choice decisions.

One surprising finding in the current study was that most LIHA students did not identify either guidance counselors or parental influence as highly significant factors in their decision to apply to a selective university. In fact, most students did not raise either topic during our interviews. However, when I asked the participants directly about the role of guidance counselors or their parents in the college application process, I received some interesting feedback that seemed to indicate that parental encouragement and influence was usually much stronger than encouragement and influence from guidance counselors, but that for most students neither guidance counselors nor parents were heavily involved in LIHA students' college choice or application process. This is a clear departure from existing literature on the role of parental encouragement in the college choice process of the general student population. This finding may indicate that parental encouragement is a more influential factor for the general population of students, rather

than LIHA students particularly, or perhaps that parental encouragement and influence plays a more substantial role in the decision making process of students whose parents also went to college, especially given that so many of the LIHA students in this study were first generation college students and many were immigrant students. This finding supports current research that shows that students are more likely to say that their parents were influential in their college application decisions if the parents went to college (Noel-Levitz, Inc., 2009).

Regarding the role of guidance counselors, most LIHA students in the current study stated that high school guidance counselors were unhelpful, either because there was a high ratio of students to available guidance counselors or because the high school and its counselors, in the experience of these LIHA students, seemed geared toward funneling students into state schools rather than more selective universities. When I asked the LIHA students in the current study about their experiences with their high school guidance counselors and the role that they did, or did not, play in their college application decisions, most students gave examples of how unhelpful the counselors were.

Robert shared with me that when it came to the staff at his high school, “we didn’t have a lot of people talking about college. For the college application process, I figured out 95% of it on my own.” Lucas told me, “My high school counselor proofread my essays once. They didn’t really have any influence, actually.” Mario mentioned that “The guidance counselors at my school kind of sucked” but that there was one counselor who helped him identify some categories of schools, such as safety, target, and reach.” Gabriela mentioned that her high school had “one guidance counselor for college” and that she “personally felt like [she] was bugging the person too much” anytime she wanted

to ask a question. When I asked Tina about her guidance counselor, she told me that she had a counselor who guided her on the application process. However, the counselor was not highly influential in her college selection process. Olivia mentioned that her high school did have guidance counselors but that they were “more geared toward state schools.” Finally, Emily noted that while her high school had a “good team of guidance counselors”, they were responsible for too many students and were therefore “not invested in the entire process but were good for general questions.”

Although the majority of LIHA students did not think their high school guidance counselors played a large part in their college application and selection process, a couple of the LIHA students told me that they had wonderful guidance counselors who helped them a lot. Interestingly, both of these LIHA students attended a private high school. For example, Lily, who went to a private high school for low-income students, told me that she had a guidance counselor who was “amazing” and that she was required to check in with her at least once a month. Lily said that the college application process was overwhelming and told me, “If I hadn’t had my guidance counselor, I don’t know what I would have done.”

Andrew, who spent his first year in a public high school before earning a scholarship to attend a private high school, told me that the access to and quality of guidance counselors were much improved at the private high school. At his public school, Andrew said that the school “had one counselor for all students, so the counselor had a lot of students to work with” and that the counselors seemed interested in funneling students toward state schools. Once in the private high school, Andrew said that there were more counselors and that during his junior year he took a college counseling class.

According to Andrew, the guidance counselor in the private high school was helpful in completing the college application process. However, when I asked him if he thought he would be at Harvard if he had stayed at the public high school, he said yes. Andrew explained that although the guidance counselor at his private high school was more helpful than the counselors at the public high school, he believes that the more important factors were his academic abilities and his standardized test scores. Therefore, while guidance counseling helped, Andrew felt that it was not instrumental to his admission to Harvard.

Parental Encouragement

Although most of the participants in the current study told me that they felt encouraged by their parent(s) during the college choice process, it is difficult to measure the extent to which this variable was influential in their decision to apply to a selective university. As with guidance counselors, most of the participants in the current study did not mention their parents or other family members until I asked them directly about their influence in the college choice process. Then, although nearly all the LIHA students told me that their parents encouraged or even expected them to go to college, most of the parents were not involved in the actual college selection or application process. For some of the participants, this was because they were first generation college students and their parents were not familiar with the college choice process. For others, their parents had gone to college in a different country and were not familiar with the application process in the United States.

One of the participants, Sophia, told me that her parents “were integral for my success and supporting me...but it was a long time since Dad went to college and Mom

went in another country.” Her perspective was one shared by many of the students I interviewed. Even the students whose parents both went to college thought that, while their parents encouraged them to work hard and stressed the importance of education, when it came to actually choosing a specific university, the students made their choices independently. Only one student, Lucas, whose parents are in China, said that his parents were totally out of the picture when it came to his college selection process.

The majority of the students I interviewed felt that their parents supported the students’ decisions and wanted the best for them. For the students who come from an immigrant background, this is in keeping with research that supports the idea that “the hardships experienced by immigrant/ethnic minority parents often fuel desire to provide their children with the very educational opportunities to which they have been denied access” (Kim & Schneider, 2005, p.1199). Of course, this is not to say that immigrant parents supported their children more than non-immigrant parents, but that such encouragement may have helped motivate these students to perform well academically, thereby helping students prepare for a selective college, even if the students themselves did not cite this encouragement as a direct influence on college application decisions.

It is interesting to note that parents and high school guidance counselors seemed to have little effect on these LIHA students’ college application decisions, yet the same students cited the strong influence of other individuals who, although affiliated with a selective university, were not relatives and generally not close confidants of the LIHA students. Therefore, one may ask why these personal connections had a greater influence on LIHA students’ college application decisions than their guidance counselors or their own parents. As the students shared, guidance counselors are often overwhelmed with

the number of students they have to work with and many could only cover the basics, which usually involved explaining to students how to apply to a school and for financial aid but little more. As for the parents, many of them had never attended college and the students told me that they could not offer much practical assistance during the college search process. However, the individuals whom LIHA students met who had a personal connection to a selective university obviously knew how to get into a selective university and could answer specific questions that guidance counselors and parents could not.

University Recruitment Activities

Lack of Personal Contact with University

During the second stage of their model, Hossler and Gallagher (1987) found that as students were actively searching for schools, schools were also actively searching for students. Therefore, during the study I sought to understand what these LIHA students experienced in terms of recruitment by selective schools. However, when I asked these LIHA students about their experiences with recruitment by selective universities, all of the students said that they generally did not feel that any selective university was searching for them or actively trying to recruit them and that universities instead tended to rely on mass emails as a preferred form of contact.

When I asked Lucas if any universities tried to contact him first for recruitment purposes his answer was short and to the point: “Nope.” However, others pointed to mass emails and brochures in the mail. Robert, for example, told me that he “received mostly emails and mail” and that he “never got a personal call from anyone.” The LIHA students who did receive mass emails told me that they did not know how seriously to

take them. “A bunch sent me emails”, Mario told me. He followed with, “I didn’t really take them seriously, though, because, like, I got emails from some really random ones and even from the good ones it was all so generic.” As for the quality of the emails, Mario continued, “They were awful. And they’d like send me emails with my name and stuff, too, in the subject line, like, ‘I just don’t know.’”

For those LIHA students who did receive some kind of personalized letter, it did not come from a selective university or from a university to which they were considering applying. Tina, for example, told me that she received a letter from Georgia Tech but that it was less about recruiting but rather, “because I did a Governor’s honor program and I also won an award from the Governor. So, that’s probably why.” Andrew told me that he received a few letters and emails but was not sure if they were “legitimate.” Even if they were, though, Andrew told me that “none of them were schools that I was considering going to.”

Lily and Sophia shared that they, too, only received mass mail and emails, but that they considered it to be something that happens to every high school senior. When I asked Lily if any selective university tried to recruit her, she told me, “No, not like specifically, just like every senior gets. We got tons of mail from different colleges but, no, nothing in particular.” Sophia said that she got mass mail but, “as for recruitment purposes, that were actual recruitment purposes, that were specific, I don’t think so.” In fact, Sophia said that she considered most of the emails she received to be spam. Sophia told me, “Definitely spam. I know they send that stuff to a wider group of students than they actually accept, so I didn’t put too much faith in those.”

Finally, Gabriela shared with me that not only did she receive a bunch of mass emails but that she continues to receive them even though she is already enrolled at Harvard. When I asked her if she received any contact from selective universities, she shared, “I don’t know how legitimate the contacts were, because lots of people get emails from colleges through the College Board program. So, lots of colleges I can’t even name.” She followed with:

I still get them, actually! And I’m already in college! Emails, phone calls, postal mail, everything. And I still get mail and I still get emails and I’m already in college, so it hasn’t stopped, which I don’t understand but a lot of students get that situation.

Based on what these LIHA students told me, they did not feel that selective universities reached out to them on a personal basis. Therefore, while universities may be searching for students at the same time that students are searching for universities, it appears that their search methods are not very effective in the experiences of these LIHA students.

When discussing the variables that influenced LIHA students’ decisions to apply to a selective university, one of the major themes that emerged was the fact that personal connections were highly influential. If LIHA students place a high value on personal connections but selective universities are relying less on personal connections and more on generic, one-size-fits-all recruiting methods, this may discourage LIHA students from applying to or enrolling in selective universities.

University Representatives at High Schools

Although the LIHA students with whom I spoke did not believe that selective universities made great efforts to reach out to them on a personal level, several students did point to high school visits by university representatives as influential in their decision to apply to a selective university. By interacting with these representatives, some LIHA students learned more about selective universities' admissions requirements, the numerous programs they offer, or even about their on-campus culture. According to these LIHA students, the selective universities' representatives were influential in their decision to apply to a selective school.

Mario told me that during his tenth grade year he met with a representative of Harvard who answered questions about what it takes to be admitted to a school of that caliber. Although Mario ended up applying to and enrolling in another selective university, he told me that by knowing Harvard's standards and aiming for those standards, he knew that he could meet the admissions requirements of other selective universities as well. In the end, Mario told me that by speaking with the Harvard representative he had a kind of focus and knew where the bar was set and what to aim for if he wanted to apply to a selective university.

Olivia shared that although her high school seemed more focused on getting students out of high school and straight into jobs, one influential factor in her decision to apply to a selective university was when her high school hosted a representative from Yale, who spoke with Olivia and her fellow students. When I asked about her decision to apply to a selective university, Olivia told me that

I think I decided during my junior year because this woman came to talk to the students about going to Yale and applying there and she was really enthusiastic about the school and she was talking about different programs and I think that the way she talked about it, like the library, there's math, there's humanities, many different things that I could do.

Finally, Sophia, too, told me that having a representative from a selective school speak with students at her high school was influential in her decision to apply to a selective university. In fact, Sophia told me that she did not even consider applying to Stanford until a representative visited her high school. Sophia explained that

Once I started looking at colleges, I actually didn't consider Stanford until a Stanford rep came to my high school and I was like, 'Wow, this is a great chance. They have a great research culture there. I might as well apply there'. And that's actually how I ended up applying there.

Based on these accounts, selective universities who send representatives to high schools around the country may do well to continue their efforts, as this method of recruitment does seem to be influential in the decisions of at least some LIHA students to apply to selective universities.

However, given the importance that LIHA students place on personal connections to a university, it may be prudent for selective universities to reach out to LIHA students on a more personal level if these universities aim to increase the number of LIHA students who apply.

Lack of Social Stigma Once on Campus

Finally, another theme that emerged from this study was related to how these LIHA students were doing both academically and socially once they arrived on campus. Although not directly related to their reasons for choosing a selective university, the data offer a glimpse into how LIHA students felt about their decisions in retrospect. Although research shows that LIHA students are just as likely as their high-income peers to thrive academically at a selective university (Giancola & Kahlenberg, 2016; Hoxby & Avery, 2012), very little has been written regarding their social experience while on campus.

After speaking with these LIHA students regarding their decision to go to college and the variables that influenced their decision to choose a selective university, I followed up by asking them how they felt now that they were actually on campus. Specifically, I asked the students if they felt their chosen university was a good fit for them and how they were doing both socially and academically. I also asked if they felt there was any stigma attached to being a LIHA student at a selective university.

First, all the students felt that they had made the right decision to apply to their selective university and eight of the ten participants felt that they were doing well academically. The only students who did not say they were doing well academically were two students who felt that it was simply too early in the semester to know for sure. Robert, for example, said that “Academically, it’s challenging enough, not too hard to the point where I would break down into depression. I feel good about my academics.” Emily told me “every class I’ve taken has been really wonderful.” These were sentiments shared by other students.

These students seemed much more excited when I asked them about their social lives while on campus. All 10 students told me that they were doing very well socially and that their fellow students were intelligent, kind, and accepting. Tina, for example, told me that “Intelligent conversation is not hard to find” at Harvard and that “other students seem to be quite pleasant and open minded.” Mario told me that at Vanderbilt he feels “very accepted and encouraged by the community.” Robert added that “socially, Duke offers a wide range of options and people are really friendly.” As another example, Lily told me that she has found a group of friends she fits in well with and that she feels like part of the Harvard community. In fact, there was no mention of any student feeling left out, discriminated against, or experiencing any type of personal social stigma. As Andrew told me about Harvard:

There are certainly some students with very high incomes and who are very well off at Harvard. It really just comes down to the personality of the individuals you’re dealing with. Personally, there haven’t been any problems in my experience.

As a follow-up to my question about their social lives while on campus, I asked the students if they thought that there were social cliques at their schools. Although these students said that there were, in fact, various social circles, most of them said that they seemed to be based more on mutual interests, either academic or athletic, rather than wealth or income. Only one student, Gabriela, told me that she thought that wealthy students seemed to hang out with each other at Harvard. Mario said that, while it was obvious that some students were wealthier than others, it had not caused any problems for him. “I see kids who have hover boards and stuff”, Mario told me, “and there’s a kid on

my floor who has a BMW M4 and he's like 18!" However, Mario told me that despite the obvious wealth gap that exists among students, he still feels very accepted and that he has no hard feelings toward students with more money. As an example, Mario said "when it comes to the kid on my floor, I'm just like 'That's great. I'm glad you get to enjoy driving that' and I'm happy and I appreciate what I have."

Overall, these LIHA students told me that they were happy with their decision to apply to a selective university and feel that their schools are a good fit for them. Most students told me that they were doing well academically and they all told me that they were doing well socially. Despite being at universities where their fellow students may come from much wealthier families, these students told me that they felt accepted by their campus communities and that they were in an environment where students were drawn to each other based more on shared academic or athletic interests rather than socioeconomic status. However, it is important to keep in mind that the majority of these students had just started their first year on campus and perhaps would offer different opinions after being on campus for several years. Because of this, future research that focuses on how LIHA students adjust and thrive on campus at selective universities is needed.

Geographic Factor

LIHA Students' High School Location Not Influential

Based on current research and available data, where a student attends high school can have a significant influence on whether the student will be accepted to a selective university. According to Hoxby and Avery (2012), many LIHA students who apply to

selective schools come from only a handful of feeder schools, usually located in large metropolitan areas across the country. Often these LIHA students are lumped with other high-achieving, high-income students in mainly private high schools. Bradshaw (2015), in his article, *Where You Attend High School Can Affect College Admission Chances* discusses data from Harvard, which show that for the class of 2017 one out of every twenty freshman students attended one of seven high schools. In *Ivy League's Proving Grounds* (2002), Coombes points out that "of the 100 U.S. high schools sending the highest percentage of students to Harvard, Yale and Princeton, 94 of them are private schools" (para. 1).

Whether it is because these private high schools have more resources, such as more guidance counselors to work with students, or because they have high academic standards for admission, it seems clear that attending certain high schools makes it easier for a student to get to a selective university. However, in the current study, the LIHA students' high schools do not appear to have influenced their decision to apply to a selective school. Although I have chosen not to identify the participants' high schools to protect the students' privacy, none of the study participants, including the two who attended a private high school, went to schools known to be feeder schools. Similarly, the majority of the study participants did not attend schools in large metropolitan areas. Therefore, for this study, the role of feeder schools does not appear to have had much significance.

Conclusion

During the analysis of my findings for the current study, I searched for major themes among the shared experiences of the study participants. Some of the major

themes that emerged involved the importance of a university's reputation; students' personal connections to a university; the availability of financial aid; and the important role that university representatives play in recruiting high school students. These themes fell under the broad categories of economic, academic, sociological, and geographic factors.

It was not possible, however, to point to one variable as being the ultimate key to understanding why a LIHA student applied to a selective university when most LIHA students do not. For example, although most LIHA students said that financial aid was an important factor in their decision to apply to a selective university, they also said that they would probably have still applied without it. These students also said that selective universities did not engage in recruitment activities, although many of the same students pointed to university representatives who visited their high schools as an important factor in helping them decide to apply to those selective universities. In the following chapter, I will discuss some these individual variables in greater detail, along with the implications of these findings.

CHAPTER 6

SUMMARY AND CONCLUSION

Overview of Study and Findings

The major purpose of this research study was to gain a better understanding of why some low-income, high-achieving (LIHA) students choose to apply to a selective university. Through a qualitative, phenomenological approach, I was able to interview 10 LIHA students at selective universities to learn more about what they identified as the major variables that influenced their decision to apply to a selective school. Similarly, these LIHA students shared their personal experiences regarding the recruitment activity, or lack thereof, of selective universities.

Previous research into the college application decisions of LIHA students has been limited and has focused mainly on potential reasons why most LIHA students do not apply to selective universities. Examining the college application decisions of LIHA students from a deficit perspective has allowed researchers to test several variables that they believe may influence the decisions of LIHA students, such as the availability of application fee waivers or the role of individual college counseling. However, instead of focusing on the reasons why LIHA students do not apply to selective universities, this study gave LIHA students an opportunity to identify the variables that influenced their decision to apply to a selective university.

Approaching the study's research questions in the context of the Hossler and Gallagher model of college choice led to several key findings: a university's reputation was a highly influential factor when LIHA students chose where to apply; most LIHA students cited the encouragement of some type of personal connection to a selective university, such as a friend or neighbor, when choosing where to apply; the availability of financial aid was an important factor for LIHA students but was not sufficient in itself to attract students to a particular school; students' scores on standardized tests, such as the SAT and ACT, gave several of them confidence to apply to selective schools; and, finally, although LIHA students mentioned the importance of a personal connection to a university, most cited a complete lack of personal contact from universities, other than generic mass mailings and high school visits by university representatives.

Discussion of Findings

Research Question 1: "What variables do LIHA students identify as influential in their decision to apply to a selective university?"

Reputation and Strength of Programs

According to Hossler and Gallagher (1987), when students are searching for universities, one characteristic they often examine is the perceived reputation of the schools. Students may base reputation on several factors including available resources and publicized college rankings. Based on findings from the current study, this appears to hold true for LIHA students as well.

Some of these students directly mentioned reputation as an important variable in their decision to apply to a selective university. Other students mentioned the importance

of name recognition and how, when not knowing many specific details about different universities, they made lists of potential universities based on how well known the schools were and what they had heard about the universities from friends and family members. Some LIHA students cited the importance of reputation for strong programs in specific areas, such as government or biology.

Several students also shared that it was very important to them that a university have a reputation for research opportunities and for challenging students academically with rigorous coursework. Therefore, it may not be surprising that many of these LIHA students chose to apply to selective universities, which are widely-known for having high standards and for providing outstanding research opportunities for their students. This finding also supports findings by Jackson and Chapman (1987) that both the reputation and perceived quality of a university influence students' decisions about where to apply.

Personal Connections

Another interesting finding from this study was that the majority of the LIHA students with whom I spoke had some type of personal connection to a selective university prior to applying to a selective school themselves. For many students that connection was in the form of friends who were enrolled at, or had graduated from, a selective university. For others, there was a neighbor or university representative who extolled the virtues and reputation of a school.

According to the LIHA students I interviewed, these personal connections influenced their decision to apply to a selective school in a number of ways. For example, some LIHA students shared that knowing someone at a selective school helped

them better understand the admissions requirements and what it would take to be admitted to a selective university, thereby giving them more confidence to apply. For others, knowing someone who attended a selective university meant that the LIHA student was able to have conversations about the university and learn more about opportunities that the school offered so that the LIHA student would feel that the university was a good fit. For some LIHA students, it was comforting to know that, if any questions or problems arose, there would be someone at or near the university who could help or simply show them around the area.

Although the LIHA students' connections were unique and offered different types of support or influence, the majority of LIHA students from this study pointed to someone who was a strong influence on their decision to apply to a selective university. Levine and Nidiffer (1996) found that low-income students who went to college often pointed to a friend or mentor as a source of encouragement to attend college. The current study suggests that, at least for some LIHA students, a friend or mentor *from a selective university* may heavily influence these students' decisions to apply to a selective university as well.

Financial Aid Availability

According to some of the LIHA students I interviewed for this study, the availability of financial aid was one of several important factors in their decision to apply to a selective university, along with other factors such as receiving high scores on standardized tests, knowing someone who went to a selective university, and the perceived reputation of a university and its programs. However, LIHA students' knowledge of the availability of financial aid also seemed to level the playing field

among some selective institutions when it came to students ultimately choosing where to apply.

Researchers studying the application decisions of LIHA students have long wondered if the high cost of attending a selective university has been the reason why the majority of LIHA students do not apply. However, as many selective universities have begun offering full scholarships to LIHA students, there has not been a huge influx of these students applying. Therefore, it is reasonable to believe that many LIHA students may be making their decision about whether or not to apply to a selective university based on factors other than financial aid availability. Of course, it is possible that many LIHA students who do not apply to selective universities are unaware of the availability of financial aid. However, even for the LIHA students I interviewed, who were aware of the financial aid availability, the cost of attendance and financial aid availability did not appear to be primary concerns when deciding whether to apply to a selective university.

Several of the LIHA students in the current study told me that financial aid availability was important to them when choosing where to apply. However, many of those same students then told me that even without the financial aid, they were determined to go to a selective university and so they would have found a way to attend, even without the financial aid. These students told me that they would much rather have the financial aid than not have it, of course, but that it was not a primary concern when deciding whether to apply to a selective university. The general consensus among these students was that where there is a will, there is a way.

Many of the LIHA students told me that while financial aid was important to them, they were well aware of the fact that most selective universities offer full

scholarships to LIHA students. Therefore, when LIHA students considered which selective university they wanted to attend, financial aid availability was not a top concern, as most of the selective universities offered similar financial aid packages. Therefore, while generous financial aid packages may be a necessary factor in attracting many LIHA students to selective universities, they do not appear to be sufficient on their own to influence a LIHA student's decision to apply to one selective university over another.

Standardized Test Scores

Of the LIHA students I interviewed for this study, half of them mentioned that performing well on a standardized test, such as the SAT and ACT, was influential in their decision to apply to a selective university. Several students mentioned that they put a lot of effort into completing practice tests before taking the actual standardized tests. Many of these students also mentioned taking the SAT or ACT several times to improve their scores.

Of the LIHA students who mentioned that their standardized test results were an influential factor in their decision to apply to a selective university, almost all shared that it was because receiving high scores on the tests gave them more confidence. Some of the students shared that when they received their test results, they felt that their scores fell in the range of what students at a selective university should have and so they thought they would apply to a selective university as well.

These findings suggest that LIHA students may perceive high standardized test scores to be necessary before applying to selective universities. In fact, previous research

by Zemsky and Oedel (1983) found that as students' SAT scores go down, they limit the quality of universities in their potential choice sets. However, it is possible that these students are attributing too much importance to their standardized test scores in universities' admissions decisions, when universities may make admissions decisions based on a number of factors, including high school grades, extracurricular activities, and application essays (Clinedinst, Koranteng, & Nicola, 2015).

Research Question 2: "In the experiences of LIHA students, what steps, if any, did selective universities take to recruit these students to apply to their school?"

Generic Mailings from Universities

According to the Hossler and Gallagher (1987) model, when students are searching for universities, universities are also searching for students. This led to the development of my second research question investigating what steps, in the experience of LIHA students, selective universities took to search for these students. Unfortunately, most LIHA students believed that selective universities did not take great efforts to reach out to them during the search phase, instead relying on generic mass mailings and emails.

Hossler and Gallagher (1987) stated that, "The best way for institutions to expand their applicant pool is to reach students at the search phase" (p.218). Freeman (1984) and Geller (1982) found that one method of reaching students that seemed to be highly influential in their application decision was through the use of personalized letters from on-campus faculty or staff, such as letters from a university president. The findings of this study also support the idea that such personal connection may be important for LIHA students as well. However, most LIHA students I interviewed shared that they did not receive any personalized contact during their college search process.

The majority of LIHA students with whom I spoke said that the only type of recruitment material they received from universities was generic mailings, both via postal mail and email. The students shared with me that they did not take these messages seriously and that they usually considered the emails to be spam. Most of the LIHA students did not recall receiving any specific, personalized information from selective universities and considered any messages that they received from other universities to be mass emails that potentially thousands of other students were also receiving.

University Representatives at High Schools

While most LIHA students stated that they did not receive any type of personalized attention from selective universities, several students shared that a representative from a selective university was influential in their decision to apply to a selective university. Although the students did not necessarily get a lot of one-on-one time with these representatives, some students shared that having a selective university's representative visit their high school and talk about their university influenced their decision to apply to the same university.

Some LIHA students shared with me that a representative from a selective university talking about their schools with high school students made them more aware of the opportunities that are available on selective universities' campuses. Others shared that having a representative visit their high schools gave them an opportunity to ask questions about what LIHA students needed to do to be admitted to a selective university. In this regard, hearing from and being able to speak with a selective university's representative was an important factor for some LIHA students when choosing to apply to a selective university.

Research suggests that receiving personalized information from a university can influence a student's decision to apply to that school (Freeman, 1984; Geller, 1982). However, most of the LIHA students I interviewed shared that they never received any personalized information. Therefore, it may be beneficial for selective universities, who are interested in recruiting more LIHA students, to rely less on mass mailings and emails and more on sending representatives to high schools where they can potentially reach many students, but on a more personal level.

Considerations, Implications, and Recommendations from Findings

This qualitative study identified several variables that LIHA students point to as influencing their decision to apply to a selective university, as well as the steps that LIHA students believe selective universities took to recruit them. The findings of this study may help researchers and universities better understand the perceptions of LIHA students regarding their college application decisions, particularly regarding: the importance of having a personal connection to a university and its impact on recruitment methods; the importance that LIHA students assign to standardized test scores; and the role that financial aid availability plays in LIHA students' college application decisions. This section discusses some of the implications these findings may have for both LIHA students and selective universities.

The Importance of a Personal Connection

The majority of LIHA students from this study who applied to and ultimately enrolled in a selective university identified some type of personal connection to a selective university. Although, as one would expect, LIHA students wanted schools with

good reputations, they felt more confident applying to these schools if they had some type of connection to them. For some, this connection was with a high school friend who had already enrolled at a selective university. For another, it was an academic advisor at a summer leadership program. For others, it was by meeting with a selective university's representative during a high school visit. No matter the connection, though, most LIHA students cited the importance of having some type of link to a selective university, which made them more interested, comfortable, and confident in applying.

While LIHA students stressed the importance of personal connections, though, selective universities themselves were engaged in recruitment methods that were anything but personal. LIHA students complained of receiving generic, one-size-fits-all letters, emails, and brochures. LIHA students shared that they did not take any of this recruitment material seriously and believed it to be the same material that every other high school student received.

We are left with a situation in which LIHA students stress the importance of a personal connection and selective universities engage in recruitment activity that is anything but personal. If selective universities want to recruit more LIHA students in the future, they may need to drastically alter how they reach out to these students. Although it may not be possible to personalize a letter or email to every LIHA student, selective universities may want to consider increasing the number of representatives they send to public high schools, even if those high schools are not in large metropolitan areas. Castelman and Page (2014) even found that universities who use text messaging systems or peer student mentors to send messages to students' mobile phones over the summer could reduce the number of students who suffer from "summer melt" (p.2), the

phenomenon of high school students who planned to go to college suddenly failing to matriculate, by “nudging” students to complete time-sensitive documents and meet other important deadlines. Selective universities may be able to use similar technologies to maintain contact with LIHA students in an effort to recruit more of them to apply.

Whether it is through the use of representatives and high school visits or by redesigning their marketing material, the current study suggests that selective universities must find ways to personalize their marketing materials if they want to recruit more LIHA students.

Importance that LIHA Students Place on Standardized Test Scores

Another interesting study from the current study was that several LIHA students noted how important it was for them to receive high scores on standardized tests before deciding to apply to a selective university. According to these students, doing well on standardized tests gave them confidence that they could apply and be admitted to a selective university.

Receiving a confidence boost from high test scores may seem like a positive, but it raises the specter that some LIHA students may not apply to selective universities if they do not do as well as they had hoped on standardized tests. This is unfortunate, given that standardized test scores are only one variable that admissions offices use in their enrollment decisions (Clinedinst, Koranteng, & Nicola, 2015). Therefore, selective universities and high school guidance counselors must do a better job of educating LIHA students about admissions criteria and all the variables that go into making admissions decisions, perhaps through their websites or through flyers and marketing materials sent to high schools.

Role of High School Guidance Counselors

Most of the LIHA students in the study told me that their high school guidance counselors were largely unhelpful and uninvolved in their college selection decisions. Aside from some technical aspects of completing application forms, most LIHA students in the study told me that their college application decisions were made completely independently. This feeling was unanimous among the students who attended a public high school.

For the students in the current study, the guidance counselors did not prove to be an impediment to reaching a selective university. However, if the guidance counselors were as unhelpful as the students made them out to be, then selective universities may need to take more proactive measures when it comes to reaching students, especially those at public high schools across the country.

One way that selective universities have been recruiting high school students is through the use of current students who serve as representatives and visit high schools. However, selective universities may want to try a more top-down approach, through which universities work directly with high school guidance counselors who can then disseminate important information to students. After all, since LIHA students seem to respond positively to having a personal connection to a university, it seems possible that selective universities that form personal relationships with teams of high school guidance counselors could reap similar benefits. By doing so, high school guidance counselors may be more likely to refer high-achieving students to their personal contacts at selective universities, rather than encouraging them to apply to a state school simply because that is where so many of their fellow students apply.

Role of Financial Aid

Although the students I interviewed for this study were from low-income families, most of them did not consider the availability of financial aid to be one of their most pressing concerns when deciding where to apply. Of course, LIHA students were interested in financial aid and they did not want to take out loans, but they were also well aware that selective universities had generous financial aid packages. Because these LIHA students knew that selective universities had generous financial aid packages, it meant that they first focused on other variables, such as a personal connection, when choosing one selective university over another.

Since these LIHA students indicated that they were aware of the large financial aid packages that selective universities offer before they started their searches, it is difficult to measure the extent to which the availability of financial aid influenced their decision about where to apply. When asked if they would have applied to the selective schools if the financial aid had not been available, many of the LIHA students indicated that they would, although it would have been a heavy burden on them and their families.

Since the introduction of full-ride scholarships for LIHA students at selective universities has not led to a huge increase in the percentage of these students applying to those schools, it is reasonable to presume that perhaps the financial aid is necessary for those LIHA students who are interested in attending a selective university, but may not be sufficient in itself to attract large numbers of these students. Therefore, it may behoove selective universities to market other aspects of their universities, including reputation, admissions criteria, and opportunities, rather than simply trying to throw money at the problem.

Recommendations for LIHA Students

Based on the findings from this study, I would make several recommendations to LIHA students surrounding academics and standardized tests, high school guidance counselors, financial aid, and finding connections to a university. Although there are no guarantees that a student will be accepted to a specific university, taking some of the following actions may help increase a student's chance of attending a selective school.

First, I would encourage students to always do their best academically. Selective schools are competitive and all of the students in this study demonstrated high levels of academic achievement. Similarly, students should study and prepare as best as possible for standardized tests, such as the SAT and ACT, but should also keep in mind that a standardized test score is only one factor that universities use to determine admissions. Therefore, students should not necessarily allow what they consider to be sub-par test scores to discourage them from applying to a selective university.

Next, LIHA students should speak with their high school guidance counselors about their college plans. Some of the LIHA students in this study found their counselors to be more helpful than others. However, even those counselors who could not provide detailed information about specific schools were able to tell students about the process of applying to college and could give them general information about necessary forms for applying for financial aid. Guidance counselors might not be the sole source of information for students about colleges, but talking with them may be a good place to start the search process and they could have connections to universities that interest LIHA students.

In terms of financial aid, students should understand that the price of tuition advertised for a university may not be the net cost that they pay. Many selective universities offer substantial financial aid packages that can fully cover the cost of tuition, room, and board. Students can cover any remaining student contributions via on-campus jobs or through the use of external scholarships. Therefore, students should work with guidance counselors to search for scholarships, such as ones offered by the Jack Kent Cooke Foundation.

Even for those students who are high-achieving but who may not qualify for a full tuition waiver, selective universities may still be a good choice when it comes to net cost. For the 2015-2016 year, for example, the median amount of loan debt that students graduated with was relatively low at the selective universities in this study. At Harvard, for those who graduated with debt, the media loan amount they took out was only \$6,500; while at Duke, Stanford, Yale, and Vanderbilt, the median amounts were \$7,500; \$12,475; \$13,500; and \$14,000, respectively (Chronicle of Higher Education, 2017). These numbers are relatively small compared to the median student loan debt for those with a Bachelor's degree in the United States in 2016, which was \$25,000 according to data from the Pew Research Center (Cilluffo, 2017). Furthermore, research on student loan debt shows that students who attend for-profit or two year colleges are more likely to default on their student loans than those who attend more selective universities (Looney & Yannelis, 2015).

Finally, if students are interested in a university, they should try to make a connection with someone who is already there or has been there, whether it be a current student, alumnus, faculty, or staff member. According to the students in this study, being

able to communicate with someone who already has a connection with a university is a great way to learn more about the school and community and may help students feel more confident about applying to the school.

Guidance counselors may be able to put students in contact with former high school students who have attended the university that interests them. If not, students may be able to search for online discussion boards or email lists for current students or alumni of the university. Similarly, students may be able to email or call a staff member in the admissions office of a university and ask if they can continue to contact the same staff member specifically in the future. By establishing some type of connection to a university that interests them, it may be easier for students to get their questions answered and, if they decide to enroll, they may be comforted by the fact that they have established some type of relationship with someone on campus before they arrive.

Recommendations for High Schools

Based on the feedback I received from students in this study, the quality of assistance students received from high school guidance counselors varied greatly. Unfortunately, many students reported that their high school counselors were unhelpful. Several students told me that there were too few counselors for the number of students who needed help. Students also told me that when they did receive help from counselors, much of it was simply telling students which forms they needed to complete to apply to a school or for financial aid. However, counselors were often unable to provide any details for specific universities.

To improve the quality of assistance they provide their students, high schools may need to increase the number of guidance counselors to accommodate the needs of a greater number of students. However, this may not be feasible due to budget constraints. Therefore, high school counselors themselves may want to establish relationships with a broad range of universities, including selective ones, so that they have contacts to whom they can direct their high school students when the students have questions that the counselors cannot answer. By establishing their own points of contact within different universities, high school counselors may be able to facilitate the type of connection that many of the students in this study pointed to as being so important in their decision to apply to a selective university.

Finally, several of the students in this study come from families that recently immigrated to the United States. For some of them, their parents do not speak very much English, did not attend college, and do not have a good understanding of the college application process or of financial aid availability. Unfortunately, this may mean that many parents are out of the picture when it comes to the college application and enrollment decisions of their children. Since students tend to point to parental encouragement as influential in their academic achievement, it may be beneficial for high schools to offer ways for parents to be more engaged in their children's education, even if they do not speak English. For example, high schools could publish newsletters in several languages, offer translators for some languages during parent-teacher conferences, and provide basic, after-school workshops on the college search and application process not just for students but for parents as well.

Recommendations for Selective Universities

Given that so many students in this study pointed to the importance of knowing someone with a connection to a selective university, it may be helpful for these universities to foster connections with a greater number of students, including LIHA students. Selective universities can create these connections by continuing and expanding current programs that send current students and alumni to high schools around the country to talk about their respective universities to high school students. Because many LIHA students at selective universities often come from a handful of feeder schools, sending these representatives to more geographically diverse schools, including in rural areas, may help attract LIHA students who may otherwise be overlooked.

Selective universities may also attract more LIHA students if they use a top-down approach and work more closely with high schools and high school guidance counselors, providing them with detailed information about their universities, financial aid packages, and ways students can connect with the university. High school counselors could then help disseminate this information to students throughout the school at several grade levels and put interested high school students in touch with students at universities. Similarly, selective universities could use peer mentors to reach out during the summer to recent high school graduates who have expressed interest in attending a selective university, helping to reduce the summer melt phenomenon.

Finally, selective universities may be able to attract more LIHA students by doing a better job of marketing their generous financial aid packages. Although the students in this study told me that they were aware of the financial aid that selective universities offered when they began their college searches, some of them also told me that they had

friends who were not aware of it. Some of these same students told me that selective universities could do a better job of advertising the net cost of attendance, perhaps through both online and television advertisements targeting LIHA students.

Limitations and Recommendations for Further Research

The current study focused on the college application decisions of LIHA students and their perception of the variables that influenced their decision to apply to a selective university. However, the current study did not focus on those LIHA students who could have applied to a selective university but chose not to do so. We cannot assume that the variables that influenced a LIHA student's decision to apply to a selective university were the same variables that led another LIHA student to apply to a non-selective university. For example, the current study discovered that many LIHA students point to a personal connection as an influential variable in their decision to apply to a selective university. However, we cannot assume that a LIHA student who did not apply to a selective university did not have such a connection, as the student's decision could have been based on a number of other variables. Therefore, further research is needed that will focus on those LIHA students who did not apply to a selective university so that we may gain a better understanding about how LIHA students who do not apply to selective universities reach that decision.

Similarly, this study focused on LIHA students who applied to and ultimately enrolled in a selective university. However, this study does not provide insight into the decisions of LIHA students who applied to selective universities but did not ultimately enroll at a selective university. Research suggests that LIHA students are siphoned away from selective universities during the application stage but that they are just as likely as

their high-income, high-achieving peers to enroll in and graduate from a selective university if they apply (Hoxby & Avery, 2012; Giancola & Kahlenberg, 2016). However, this does not provide researchers with any insight into the matriculation decisions of those LIHA students who apply to a selective university but ultimately choose to enroll in a non-selective university.

Another limitation of the current study is that it focused on LIHA students' decisions to apply to a selective university. However, it did not focus on what happens with the LIHA students once they get to campus. Although research suggests that these students are just as likely as their high-achieving, high-income peers to perform well academically and to graduate, there is little research concerning their socialization and how they adapt to college life on the campus of a selective university, where the majority of students may come from much wealthier backgrounds. Although the students in the current study seem to be thriving both academically and socially, they had not been on campus for very long when the study took place and further studies about their adaptation during later years may provide greater detail into their assimilation. Such research may be beneficial for selective universities who seek to recruit LIHA students and for the LIHA students who may be concerned that they may not fit in on a selective university's campus.

Since this research focused on the college application decisions of LIHA students in general, it may be beneficial for researchers in the future to look at subsamples of the LIHA student population to discover if these findings are similar for LIHA students of different ethnic backgrounds or for students with immigrant backgrounds. Although the group of students in this study represented several ethnicities and came from different

immigrant and non-immigrant backgrounds, this study did not focus on ethnicity or immigrant status. Therefore, future research that narrows the focus from the college application decisions of LIHA students in general to other, more specific populations may be helpful.

Finally, one limitation of the current study is that, like with other qualitative research, one cannot generalize the findings to a larger population as one can with quantitative research. The great benefit of qualitative research, though, lies not with its generalizability but with its ability to inform others about the experiences of participants in ways that may not be easily quantifiable. Future research studies focusing on the college application decisions of LIHA students at selective universities could provide support for the findings of the current study or may provide new insights into the variables that influence these students' choices.

Conclusion

The findings of this study suggest that the LIHA students who applied to selective universities did so because they wanted to attend universities with good reputations for strong programs. Of course, selective universities already have good reputations and strong name recognition. However, most LIHA students still do not apply to these selective universities. The LIHA students in this study who did apply and ultimately enrolled in one of these selective universities shared that they did so because the universities offered generous financial aid packages, they had some type of personal connection to the university, and because their standardized test scores gave them the confidence that they could do well at a selective university.

Regarding recruitment activities of selective universities, the perception of these LIHA students was that the universities did not connect with them on a personal level, instead relying almost solely on the use of generic, mass mailings with a few students meeting university representatives sent by selective universities to the LIHA students' high schools. In the future, selective universities may want to focus on making their recruitment methods more personal to attract more LIHA students who may otherwise choose to apply to non-selective universities.

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APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL



OFFICE OF RESEARCH COMPLIANCE

INSTITUTIONAL REVIEW BOARD FOR HUMAN RESEARCH
APPROVAL LETTER for EXEMPT REVIEW

This is to certify that the research proposal: **Pro00046650**

Entitled: *A Qualitative Research Study of the College Application Decisions of Low-income, High-achieving Students at Selective Universities in the United States*

Submitted by:

Principal Investigator: Troy Mothkovich
College/Department: Education
Educational Administration
Wardlaw College 312
Columbia, SC 29208

was reviewed in accordance with 45 CFR 46.101(b)(1), the referenced study received an exemption from Human Research Subject Regulations on **7/22/2015**. No further action or Institutional Review Board (IRB) oversight is required, as long as the project remains the same. However, the Principal Investigator must inform the Office of Research Compliance of any changes in procedures involving human subjects. Changes to the current research protocol could result in a reclassification of the study and further review by the IRB.

Because this project was determined to be exempt from further IRB oversight, consent document(s), if applicable, are not stamped with an expiration date.

Research related records should be retained for a minimum of three (3) years after termination of the study.

The Office of Research Compliance is an administrative office that supports the University of South Carolina Institutional Review Board (USC IRB). If you have questions, contact Arlene McWhorter at arlenem@sc.edu or (803) 777-7095.

Sincerely,



Lisa M. Johnson
IRB Manager

APPENDIX B

EMAIL INVITATION TO STUDENTS

A Qualitative Research Study of the College Application Decisions of Low-income, High-achieving Students at Selective Universities in the United States

Troy A. Mothkovich, Principal Investigator

Hi. My name is Troy Mothkovich and I am a doctoral student at the University of South Carolina, in the Department of Educational Administration. As part of my degree requirements, I am currently working on my dissertation, which involves the study of the college application decisions of low-income, high-achieving students at selective universities in the United States. You are being invited to participate in this study because the Jack Kent Cooke Foundation has identified you as a low-income, high-achieving student who is enrolled at a selective university.

Participation in this study is completely voluntary and there are no penalties for not participating. However, I would certainly appreciate your time and participation. The purpose of this study is to better understand how some low-income, high-achieving students who attend selective universities make sense of the college application decision process. Topics discussed during the interview include when you decided to go to

college; what factors you considered particularly influential in deciding where to apply to college; if there were others (e.g. family, friends, or high school counselors) who influenced your decision about where to apply to college, etc.

The data that I collect from this study will hopefully help scholars in the field of education better understand how students like you decide where to apply and enroll in college. Also, the study may potentially help universities implement strategies for successfully recruiting more low-income, high-achieving students to their campuses.

The study involves a recorded telephone interview, which should last approximately 1 hour. All data I collect during the study will be confidential, which means that I will not include your name in any report I write based on this study. In fact, I will ask you to choose a pseudonym (fake name) to use during the interview before we begin the actual recording. I will use the recording to transcribe the interview for analysis. The recording will then be destroyed.

Again, your participation is voluntary and you have the right to not answer any question that you do not want to answer and/or to withdraw from the study at any time.

To thank you for your time and participation, after we complete the interview, I will email you a \$25 Amazon.com electronic gift card.

If you are interested in participating in the study, please contact me at troy@usca.edu or 803-641-3795 to schedule a time for an interview. If you have any questions about your rights as a participant in this research, you may contact the University of South Carolina's Office of Research Compliance at 803-777-7095. You may also contact me

directly at troy@usca.edu or 803-641-3795. Finally, my dissertation chair's name is Dr. Spencer Platt and you may contact him at splatt@mailbox.sc.edu or 803-777-9118.

Thank you,

Troy A. Mothkovich

APPENDIX C

INTERVIEW PROTOCOL

You are being asked to participate in this study because you are a recipient of a Jack Kent Cooke Foundation Scholarship, which gives scholarships to low-income, high-achieving students, and because you applied to and ultimately decided to attend, a selective university. This interview will be conducted by me, Troy Mothkovich, the principal investigator of the study.

The goal of the research is to gain a better understanding of how low-income, high-achieving students make sense of their decisions to apply to a selective university and which factors they believe were most important during their college-application decision-making process.

You are not required to answer any question that you do not want to, participation is fully voluntary, and you may stop the interview and withdraw from the study at any time. After the interview ends, I will email you an electronic gift card from Amazon.com in the amount of \$25. If you do not want to answer certain questions, or if you choose to stop the interview early, you will not be penalized in any way and you will still receive the \$25 gift card.

This interview will be recorded. Before we begin recording, I will ask you to choose a pseudonym to use throughout the interview so that we can maintain your confidentiality. I anticipate the interview will last around 1 hour. If you have any questions before, during, or after the interview, you can always contact me at mothkov@email.sc.edu or 803-641-3795. You may also contact my research advisor, Dr. Spencer Platt at splatt@mailbox.sc.edu or 803-777-9118. Finally, you can also contact the University's Office of Research Compliance at 803-777-7095.

Student's Life & Familiarity with College

1. Are you the first member of your family to attend college? If not, who else in your family has attended?
2. If so, which school(s) did they attend?
3. Could you describe your high school experience? For example, which school did you attend? Was it public or private? How did you do there both academically & socially?
4. When did you begin to seriously consider going to college?
5. When you thought of attending college, how did you feel? Did you have any worries? Were you scared?

6. Were there any barriers you thought could prevent you from attending college?
7. Why did you ultimately decide to go to college? Were there any strong motivating factors?
8. Of those motivating factors, is there one that you would consider to be the *primary* motivating factor for going to college?
9. How did you do on your SAT/ACT? Did your score(s) influence your decision to go to college or to apply to a particular school?
10. The Jack Kent Cooke Foundation gives scholarships to low-income, high-achieving students. Growing up, did you consider yourself “low-income”?
11. Could I ask how many individuals are in your family?
12. Could I ask your approximate family income?

College Application Experience

13. After you made the decision to attend college, how did you choose where you would apply?
14. How many universities did you ultimately apply to?

15. Were there universities you considered applying to but ultimately did not? If so, why didn't you apply?
16. Similarly, were there universities you were hesitant to apply to but did so anyway?
17. Were there particular characteristics you were looking for in a university (e.g. size of the school, school's location, reputable program/majors)?
18. Of those characteristics, which do you think were the *most* important to your decision to apply?
19. Did any universities contact you first?
20. Did you take a tour of any university campus?
21. How did you get more information about any university that interested you (e.g. Did you visit websites, look through college guides such as US News & World Report)?
22. Did anyone else influence your decision about where to apply (e.g. friends, family, guidance counselors)?

23. Did anyone help guide you through the college application or financial aid process?

24. Once you decided where to apply, how did your family/friends feel about your decision?

College Selection Experience

25. Were you accepted by more than one university? [Follow up] If so, how did you decide which university you would ultimately attend? Did anyone else help you reach that decision?

26. If you had to pick the top reason for attending this university, what would it be?

27. What about other reasons such as X and Y (e.g. availability of financial aid, university location, family influence, etc.)? To what extent did they influence your decision?

28. Did you have any worries/anxieties about attending this university?

29. What was the most challenging part of the college selection process for you?

30. Now that you have decided to attend this university, do you feel like it is a good fit for you both academically and socially?
31. How confident are you that you will graduate from this university?
32. Research shows that most low-income, high-achieving students do not apply to selective universities even when universities offer generous financial aid packages. Why do you think that is?
33. What advice would you give to a university that wanted to attract more low-income, high-achieving students?
34. What advice would you give to a low-income, high-achieving student who wants to go to college but isn't sure where he/she should apply?
35. Looking back at your college application experience, is there anything you wish you would have done differently?
36. What are your future plans?
37. Finally, is there anything else related to your college-application/selection decision-making process that you think is important for others to know/understand that I maybe didn't ask you about?