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# Factors Affecting Deaf and Hard-of-Hearing Students' Selection of a Deaf-Serving Institution: Deaf Identity Influences on College Choice

## Abstract

Student-university fit leads to increased satisfaction with a student's postsecondary institution and has a positive effect on college completion (Braxton, Vesper, & Hossler, 1995). As increasing numbers of deaf and hard-of-hearing students elect to attend college (Newman, Wagner, Cameto, Knokey, & Shaver, 2010), the relationship between college choice and completion points to a need to better understand how students make their college decisions. Using a qualitative phenomenological design, the present study examined factors that influence deaf and hard-of-hearing students' college choice and explored how deaf identity influences selection of a deaf-serving institution (DSI). The theoretical framework for the study was deaf identity development theory, which postulates that people who are deaf or hard of hearing have varying degrees of awareness of and identification with Deaf culture and the Deaf community (Glickman, 1993). Study participants were deaf and hard-of-hearing freshman baccalaureate students at a DSI in the United States. Data was gathered using individual interviews and a document reflection activity. Analysis of the data revealed four themes that describe the study participants' college choice process: Secondary School Influences, Preparation for Career and Life, Accommodation for and Acceptance of Individuals who are Deaf or Hard of Hearing, and Searching for Kindred. The findings point to the importance of educational environments that can appropriately serve the needs of deaf and hard-of-hearing students. The results also point to a fundamental role in higher education for DSIs, which serve both the educational and sociocultural identity needs of deaf and hard-of-hearing students.

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Factors Affecting Deaf and Hard-of-Hearing Students' Selection of a  
Deaf-Serving Institution: Deaf Identity Influences on College Choice

By

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Submitted in partial fulfillment  
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Ed.D. in Executive Leadership

Supervised by

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St. John Fisher College

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## **Dedication**

Although the actual writing of a dissertation is a very solitary undertaking, a project of this magnitude could never be completed without significant involvement from others. I am exceedingly grateful for all of the individuals who accompanied me on this unforgettable journey. First, and foremost, I thank the students who participated in my study. I admire their spirit and am humbled by their courage and their willingness to share their stories with me. I also am grateful to my dissertation committee—my chairperson, Dr. Jeannine Dingus-Eason, and my committee member, Dr. Shannon Cleverley-Thompson—for always challenging me to dig deeper and go further. This study would not be what it is without them. I am thankful for the time and dedication of all of the faculty members who taught the courses I took in the Executive Leadership program at St. John Fisher College, and for Betsy Christiansen, who truly is the glue who holds the program together. Finally, I owe a deep debt of gratitude to my family, friends, and colleagues who believed in me, cheered me on, and gave me strength when I needed it most. This dissertation is dedicated to all of the people in my life whose love, friendship, and support have seen me through.

### **Biographical Sketch**

Pamela L. Carmichael is the Executive Director of Communications, Marketing, and Multimedia Services at Rochester Institute of Technology's National Technical Institute for the Deaf, where she has worked since 1998. She holds a bachelor's degree in Communication Studies from SUNY Brockport and a master's degree in Communication and Media Technologies from RIT. She entered the Executive Leadership program at St. John Fisher College in 2011 and pursued her research on deaf identity and other factors influencing the college choice process of deaf and hard-of-hearing students under the direction of Dr. Jeannine Dingus-Eason and Dr. Shannon Cleverley-Thompson. She received her Ed.D. in 2013.

## **Abstract**

Student-university fit leads to increased satisfaction with a student's postsecondary institution and has a positive effect on college completion (Braxton, Vesper, & Hossler, 1995). As increasing numbers of deaf and hard-of-hearing students elect to attend college (Newman, Wagner, Cameto, Knokey, & Shaver, 2010), the relationship between college choice and completion points to a need to better understand how students make their college decisions. Using a qualitative phenomenological design, the present study examined factors that influence deaf and hard-of-hearing students' college choice and explored how deaf identity influences selection of a deaf-serving institution (DSI). The theoretical framework for the study was deaf identity development theory, which postulates that people who are deaf or hard of hearing have varying degrees of awareness of and identification with Deaf culture and the Deaf community (Glickman, 1993).

Study participants were deaf and hard-of-hearing freshman baccalaureate students at a DSI in the United States. Data was gathered using individual interviews and a document reflection activity. Analysis of the data revealed four themes that describe the study participants' college choice process: Secondary School Influences, Preparation for Career and Life, Accommodation for and Acceptance of Individuals who are Deaf or Hard of Hearing, and Searching for Kindred. The findings point to the importance of educational environments that can appropriately serve the needs of deaf and hard-of-hearing students. The results also point to a fundamental role in higher education for

DSIs, which serve both the educational and sociocultural identity needs of deaf and hard-of-hearing students.

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## **Chapter 1: Background to the Study**

### **Introduction**

Student participation in higher education is on the rise in the United States (Baum, Ma, & Payea, 2010). From 1999 to 2009, the number of students enrolled in postsecondary institutions increased 39%—from 14.8 million students to 20.4 million (NCES, 2011). This trend is expected to continue. The National Center for Education Statistics projects that total postsecondary enrollment will increase 17% between 2008 and 2019 and that enrollment of first-time freshmen will increase 13% over the same period (Hussar & Bailey, 2011). The largest increases are expected among students from minority populations. For example, between 2008 and 2019, enrollment of Hispanic students is expected to increase 45%, while 30% increases are expected in enrollment of Black students and Asian students (Hussar & Bailey, 2011). Over the same period, enrollment of White students is only expected to increase by 7% (Husser & Bailey, 2011).

The increasing heterogeneity among postsecondary students is not limited to racial or ethnic diversity. Students with disabilities, including those who are deaf or hard of hearing, also are participating in postsecondary education at increasing rates (Newman, Wagner, Cameto, Knokey, & Shaver, 2010). In a study comparing results from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS-2), Newman et al. (2010) found that from 1995 to 2005, the percentage of students with disabilities enrolled in postsecondary education within four

years of completing high school increased from 26% to 46%.<sup>1</sup> The percentage of deaf and hard-of-hearing students participating in postsecondary education increased from 50% in 1995 to 73% in 2005 (Newman et al., 2010).

Increased participation in postsecondary education by students who are deaf or hard of hearing comes at a time when the United States is moving from an industrial-based economy to one that is increasingly knowledge-based (Carnevale & Desrochers, 2002). This transition entails a shift from manufacturing and services involving physical labor and natural resources to those that require more intellectual capabilities and knowledge-based activities (Powell & Snellman, 2004). As the United States makes this shift, postsecondary education becomes more critical to ensure that workers have the intellectual capacity and specialized skills needed for jobs that are increasingly knowledge dependent (Carnevale & Desrochers, 2002). President Obama (2009) has called on all Americans to complete at least one year of college so that individuals, and the country as a whole, are able to remain competitive in the new economy.

As more students pursue postsecondary education, the benefits that accrue to degree holders continue to be well documented (Trostel, 2010). College graduates lead healthier lifestyles and are more likely to engage in civic activities such as volunteerism and voting (Baum, Ma, & Payea, 2010). Those who complete a college degree also earn more and are less likely to be unemployed than those without a degree (Baum, Ma, & Payea, 2010). Individuals who do not have college-level skills not only are more likely to have jobs with lower pay and fewer benefits, they also are more likely to experience

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<sup>1</sup> The NLTS was a six-year study of students with disabilities in grade 7 or above in the 1985-86 school year. The NLTS-2 was a 10-year study of students with disabilities in grade 7 or above in December 2000. Findings from both studies generalize to the U.S. population of students with disabilities as a whole as well as to students in each federal special education disability category (Newman et al., 2010).

problems such as illness, poverty, addiction, and violence (Carnevale & Desrochers, 2002). Those without college degrees also are more likely to use public assistance programs such as Supplemental Security Income, Medicaid, food stamps, energy subsidies, and child care assistance (Trostel, 2010).

Higher wages and lower rates of unemployment are among the benefits of completing college for deaf and hard-of-hearing individuals as well. In analyzing NLTS-2 data, Walter (2010) found that more than 70% of deaf and hard-of-hearing individuals with college degrees are in the labor force, compared to only about 50% of those without degrees. Walter also found that higher levels of degree attainment are associated with lower rates of unemployment among deaf and hard-of-hearing individuals, and that college completion has significant economic benefits, with graduates earning 2.3 times more than non-graduates. Deaf and hard-of-hearing individuals with bachelor's degrees will earn 68% more over the span of their careers than those who attend college but leave prior to earning a degree (Walter, Clarcq, & Thompson, 2002).

### **Problem Statement**

Given the benefits of enrolling in and completing college, it is important to understand the process that individuals, including those who are deaf or hard of hearing, use in deciding whether and where to attend college. Such an understanding could help guide student decision-making regarding postsecondary education, which is important because the college a student chooses could mean the difference between persisting and dropping out (Braxton, Vesper, & Hossler, 1995). The alignment between a student's expectations and actual experience at college influences the extent to which that student establishes membership in the academic and social communities of the college and

remains enrolled (Braxton, Vesper, & Hossler, 1995). Students bring various personal characteristics, experiences, and backgrounds to college, each of which influences students' college performance, expectations, and commitment (Tinto, 1975, 1986). These, in turn, influence students' integration into the academic and social systems at college. Thus, the extent to which there is alignment between the student and the selected school ultimately influences persistence to graduation (Tinto, 1975, 1986). Gilbreath, Kim, and Nichols (2011) contend that “poor student-university fits are likely to result in decreased satisfaction, well-being, and performance” (p. 47), while good fits are likely to reduce attrition.

**College choice.** Given the importance of student-university fit and the relationship between college choice and college completion, there is value in understanding how students, including those who are deaf or hard of hearing, determine which college to attend. College choice models can help explain the cognitive processes involved in college selection. Such models view college choice as a multistage developmental process during which students acquire knowledge that helps lead them to a college decision (Bergerson, 2009). Hossler and Gallagher (1987) synthesized a number of studies in the college choice literature to develop a three-stage model to explain how students make decisions about postsecondary education. They define the three phases of the college selection process as predisposition, search, and choice. In the predisposition phase, students decide whether or not they want to attend college. Factors such as students' socioeconomic status and academic ability as well as the attitude and support of their parents influence this stage of the process. In the search phase, students begin seeking more information about colleges and develop a choice set—a group of

institutions in which they are interested. Socioeconomic status, academic ability, and their parents' education level are factors that influence this stage of the process. In the final stage, the choice phase, students evaluate the institutions in their choice set and narrow their options, culminating in an enrollment decision. Factors influencing this stage are students' perceptions of institutional quality and the level of financial aid a given institution offers (Hossler & Gallagher, 1987).

While broad college choice models can provide insight into college selection, they may not effectively predict or explain the college choice processes of all students. Hossler and Gallagher's (1987) model is perhaps the most widely cited college choice process model, and it has been the starting point for many scholarly studies (Bergerson, 2009). However, it is normed on students from White, suburban, middle to upper socioeconomic cultures and may, therefore, lack applicability to students with diverse backgrounds (Muhammad, 2006, 2008). Engberg and Wolniak (2009), for example, have found that there are significant race-related differences in the factors that influence students' college choices. Studies such as those by Heilig, Reddick, Hamilton, and Dietz (2011); Kim, DesJardins, and McCall (2009); O'Connor (2009); and O'Connor, Hammock, and Scott (2010) also have found that the college choice experiences of students vary based on race and ethnicity. Such findings support Freeman's (2005) argument that Hossler and Gallagher's (1987) model must be expanded to include the role that culture plays in college choice. Freeman contends that the ways in which families and schools influence students' college choice processes can vary based on students' cultural characteristics. This points to the importance of studying the college choice processes of students with varying cultural backgrounds in order to understand

their experiences and develop culturally relevant practices for assisting them and their families in making college decisions (Freeman, 2005; Bergerson, 2009).

While calls to consider cultural influences on college choice thus far have focused on race and ethnicity, cultural diversity can be thought of in a broader sense. Many, though not all, deaf and hard-of-hearing people define their deafness in terms of linguistic, social, and cultural factors instead of in terms of their audiological status (Reagan, 1995). These individuals do not see themselves as disabled, but rather as members of a “cultural and linguistic minority” (Reagan, 1995, p. 239). This sociocultural perspective of deafness may be a consideration for some deaf and hard-of-hearing students as they explore the choices available to them for college.

**Postsecondary education options for deaf and hard-of-hearing students.** Prior to the passage of Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination against otherwise qualified individuals with disabilities by any public entity or any program or activity receiving federal funds, many students with disabilities were denied admission to postsecondary institutions (Paul, 2000). Denying admission to students with disabilities was often the result of perceptions on the part of faculty and administrators that disabled students would not be able to succeed in mainstream college programs or be able to gain employment after college (Nugent, 1978). Colleges also denied admission to students with disabilities because their campuses were not equipped to accommodate disabled students (Brooks & Brooks, 1962). For example, Mahan (1974) found that 22% of the 994 four-year institutions responding to a 1974 survey by the accrediting agencies of the American Council on Education indicated that they would deny admission to deaf applicants solely because of their disability.

Subpart E of Section 504 applies to students with disabilities in postsecondary education and stipulates that they may not be discriminated against in admissions, financial aid, academic and other programs, services, and activities (Wolanin & Steele, 2004). The passage of the Americans with Disabilities Act (ADA) in 1990 extended protection for individuals who are disabled by prohibiting discrimination by private as well as public entities, including postsecondary institutions, and requiring that they provide reasonable accommodations for individuals with disabilities (Shaw, 2009; Stodden, Jones, & Chang, 2002; Wolanin & Steele, 2004). Section 504 and the ADA were created out of a growing recognition that many problems faced by people with disabilities, including unemployment and lack of education, were not inevitable consequences of their disabilities, as had been previously assumed, but rather, were the result of societal attitudes toward people with disabilities and discriminatory policies and practices (Mayerson, 1992).

Section 504 and the ADA helped expand postsecondary education opportunities for deaf and hard-of-hearing students. For example, a 2009-2010 study conducted for the Office of Special Education and Rehabilitative Services in the U.S. Department of Education revealed that, of the estimated 4,200 two- and four-year postsecondary institutions in the United States, 73% enrolled deaf or hard-of-hearing students (Raue & Lewis, 2011). Students in the United States who are deaf or hard of hearing can essentially choose from among three options for postsecondary education (Heath Resource Center, n.d.). Each of these postsecondary options has features that could be seen as benefits or drawbacks, depending on a given student's needs and desires. A description of each option follows.

One postsecondary possibility for deaf and hard-of-hearing students is a mainstream college or university. This option offers the opportunity to learn from and with teachers and students who are part of the hearing majority. Some deaf and hard-of-hearing students may perceive this as a benefit, viewing it as good preparation for a career and life in the mainstream of a society dominated by the hearing majority (Menchel, 1995). Other deaf and hard-of-hearing students may perceive this as a drawback, preferring instead to attend an institution where they are not in the minority population or where there at least is a community of other deaf and hard-of-hearing students (Call, 1992; Foster & Elliott, 1986; Smith, 2004).

A second option is a specially funded program that serves a sizeable number of deaf and hard-of-hearing students at a mainstream college or university, such as California State University Northridge (CSUN)<sup>2</sup>. Such programs offer students the opportunity to learn from and with teachers and students who are part of the hearing majority while also providing a community of deaf and hard-of-hearing peers. Some students may see this as a “best of both worlds” situation, preparing them for a career and life in the mainstream of a society dominated by the hearing majority while still providing some opportunities for interaction with deaf and hard-of-hearing peers (Call, 1992; Smith, 2004). Other students, however, may prefer to attend an institution where they are not part of a small minority population (Foster & Elliott, 1986; Smith, 2004).

A third option is one of two postsecondary institutions founded by the U.S. Congress and funded by the federal government to serve deaf and hard-of-hearing students—Gallaudet University in Washington, D.C., or the National Technical Institute

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<sup>2</sup> CSUN has a National Center on Deafness (<http://www.csun.edu/ncod/>) that serves approximately 175 deaf and hard-of-hearing students out of a total student body of approximately 36,000 (<http://www.csun.edu/aboutCSUN/>).

for the Deaf (NTID) at Rochester Institute of Technology (RIT) in Rochester, N.Y. Originally established as a residential school for young deaf and blind students, Gallaudet was authorized to confer college degrees when a bill was passed by Congress in 1864 and signed into law by President Abraham Lincoln (Gallaudet University, n.d.). At the time, Gallaudet was the only institution in the world providing postsecondary education for individuals who were deaf (Hoag, 1989). Its founding marked the first time that direct federal aid was provided for education (McPherson, 2008).

NTID was established by an act of Congress that was signed into law by President Lyndon Johnson in 1965 (Hoag, 1989). The institution was created to provide technical and professional education for deaf and hard-of-hearing individuals in order to prepare them for careers in business and industry that increasingly required technical skills (Hoag, 1989). RIT was chosen as the host institution for NTID in 1966, and the first class of deaf students enrolled in 1968 (Hoag, 1989).

For the purposes of this study, Gallaudet and NTID are referred to as deaf-serving institutions (DSIs). Although both institutions enroll hearing students, they each also enroll more than 1,000 deaf and hard-of-hearing students (Gallaudet University, 2011; National Technical Institute for the Deaf, 2011). Each DSI also has a number of deaf and hard-of-hearing faculty, staff and administrators (Gallaudet University, 2011; National Technical Institute for the Deaf, 2011). Some deaf and hard-of-hearing students may view the opportunity to be part of such a large deaf and hard-of-hearing community as providing social and cultural benefits not available to them at mainstream institutions (Foster & Elliott, 1986; Smith, 2004). Stinson, Scherer, and Walter (1987) argue that a major factor in deaf and hard-of-hearing students' interest in DSIs is the opportunity for

social interaction with a large population of deaf and hard-of-hearing peers. The social and cultural benefits of DSIs might be viewed as similar to those of other minority-serving institutions (MSIs).

**The role of minority-serving institutions.** An MSI is an institution that enrolls a high proportion of students from a given minority population (O'Brien & Zudak, 1998; Staten, Staten, Hollis, & Turner Whittaker, 2009). Historically Black colleges and universities (HBCUs), Hispanic-serving institutions (HSIs), Tribal colleges and universities (TCUs), and Asian American and Pacific Islander-serving institutions (AAPISIs) are among the formally designated MSIs (Li & Carroll, 2007; Staten et al., 2009). HBCUs are identified by law as degree-granting institutions established before 1964 with the principle mission of educating African Americans (Li & Carroll, 2007; Staten et al., 2009). Most HBCUs were established in the late 19<sup>th</sup> century to serve African American students who were prohibited from attending White institutions (Gasman, Lundy-Wagner, Ransom, & Bowman, 2010; O'Brien & Zudak, 1998). The majority of private HBCUs were established by missionary organizations with the goal of bringing Christianity to former enslaved Africans, who, in the view of the missionary organizations, needed to be taught "the rules and values of modern society" in order to avoid becoming "a national menace" (Anderson, 1988, p. 241). When funding from missionary organizations began to run out, Northern industrialists provided support for private HBCUs with the goal of controlling education to produce graduates with skills to match industry needs (Gasman et al., 2010). The majority of public HBCUs were created as a result of passage of the second Morrill Act of 1890, which required states that did not

allow African American students to attend public postsecondary institutions to establish agricultural and mechanical institutions for those students (Gasman et al., 2010).

Like HBCUs, TCUs also are designated as such by law (Li & Carroll, 2007). The majority of TCUs have been established by American Indian tribes with the goal of providing an affordable, culturally sensitive college education for their members (American Indian Higher Education Consortium, 1999; O'Brien & Zudak, 1998), but a few have been chartered by the federal government (American Indian Higher Education Consortium, 1999; Li & Carroll, 2007). Because both HBCUs and TCUs are designated as such by law, the number of institutions cannot increase unless Congress designates additional institutions as HBCUs or TCUs (Li & Carroll, 2007).

HSIs are defined as degree-granting institutions with a full-time-equivalent undergraduate enrollment of 25% or more Hispanic students, while students in each of the other minority groups comprise less than 25% of the total enrollment (Li & Carroll, 2007). HSIs are not institutions that were created with the express purpose of serving a specific population; instead, most of them are institutions that evolved as HSIs due to being situated in locations with large Hispanic populations (O'Brien & Zudak, 1998). Similar to HSIs, AAPISIs are institutions where Asian American/Pacific Islander students comprise at least 25% of the total undergraduate enrollment, while students in each other minority group comprise less than 25% of the total enrollment (Li & Carroll, 2007).

Although the circumstances surrounding the creation of MSIs varies by category, they all have played a significant and similar role in educating students from minority populations throughout history (Staten et al., 2009). In addition to serving the educational

needs of minority students, MSIs also help address their social and cultural identity needs (Raines, 1998; Staten et al., 2009). Raines (1998) contends that, unlike mainstream postsecondary institutions, which were created for “nonminority populations” (p. 72), MSIs provide educational experiences for students “within their own social and cultural contexts” (p. 72), promoting cultural values and behavior expectations, and often even providing some coursework in the group’s native language. For example, TSIs offer courses in tribal languages and traditional tribal literature courses (American Indian Higher Education Consortium, 1999) as well as ethnocentric courses that focus on American Indian issues and worldviews (Cole, 2006). Similarly, HBCUs offer ethnocentric courses that focus on African American issues and perspectives (Cole, 2006).

The cultural context of MSIs can lead to better outcomes for some students by reducing “the difficult acculturation process” they might experience in mainstream institutions (Raines, 1998, p. 72). In addition, there are a number of characteristics associated with MSIs that can contribute to student success (Raines, 1998). These characteristics include such things as open admissions processes, relatively lower tuition costs, high levels of financial aid, culturally relevant curriculum, a nurturing environment, and a range of student services (Raines, 1998). MSIs also can provide leadership opportunities for students that may be unavailable to them at mainstream institutions (Raines, 1998). These same characteristics can contribute to positive experiences for deaf and hard-of-hearing students at DSIs.

Given the unique role of MSIs, including those that serve deaf and hard-of-hearing students, and the potential benefits for students who attend, there is value in

understanding the process students use in determining whether to enroll in these institutions. Such an understanding could help guide student decision-making, which, as already noted, has implications for persistence in and completion of college. In spite of this, very little of the large body of research related to MSIs focuses on college choice (Gasman et al., 2010). The findings of a few studies, however, suggest that some students consider or select MSIs for reasons related to an interest in exploring or developing their racial, ethnic, or cultural identity. For example, Van Camp, Barden, Ren Sloan, and Clarke (2009) found that opportunities for racial identity development were an important factor in students' decisions to attend an HBCU. Students indicated that they had enrolled at an HBCU because they wanted to take courses that focused on racial issues; wanted to learn more about race, racism, and historical matters related to race; and felt that attending an HBCU was a matter of racial identity and pride (Van Camp et al., 2009). Similarly, Freeman (1999, 2005) found that students' desires to seek their African American roots and enhance their awareness and understanding of African American culture were factors in their consideration of HBCUs. It is possible that opportunities for identity development and enhanced cultural awareness are factors in deaf and hard-of-hearing students' selection of a DSI as well. Humphries and Humphries (2011) suggest that young people who are deaf or hard of hearing have to decide whether they want to attend a mainstream "hearing" college (p. 161) or a DSI that will allow them to immerse themselves among other deaf people and develop or strengthen their Deaf<sup>3</sup> identity. As increasing numbers of deaf and hard-of-hearing students elect to attend college (Newman, Wagner, Cameto, Knokey, & Shaver, 2010), the relationship between college

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<sup>3</sup> The upper case Deaf is a label used to refer to those who have a social, political, and cultural affiliation with the Deaf community, while the lower case deaf refers to the audiological condition of hearing loss (Leigh, 2009).

choice and college completion points to a need to better understand how deaf and hard-of-hearing students make their college decisions.

### **Theoretical Framework**

Deaf identity development (DID) theory provides a lens through which to examine deaf and hard-of-hearing students' college-related decision-making as a sociocultural process, rather than simply a cognitive process. A student's college search might be conceived, at least in part, as seeking an answer to the question, "Where do I belong?" Similarly, Carty (1994) suggests that "the search for identity is the search for answers to the questions 'Who am I?' and 'Where do I belong?'" (p.40). Karp, Holmstrom, and Cray (1998) have noted that, in searching for a college, students are looking for a good fit—a place where they will feel comfortable, where there are other students who are like them, who share their interests. Karp et al., also argue that students expect that their experiences in college will allow them to refine, and in some cases or to some extent, change their identity. As a result, in searching for a college, students are searching for a place where someone with their identity characteristics and identity aspirations will be able to succeed (Karp, Holmstrom & Cray, 1998). DID theory offers a framework for exploring the possibility that a deaf or hard-of-hearing student's identity, or the identity she hopes to develop, may play a role in her college selection.

DID theory provides a model for understanding how people come to think of themselves as Deaf—as being part of the culturally Deaf community (Glickman, 1993). The theory postulates that people who are deaf or hard of hearing have varying degrees of awareness of and identification with Deaf culture and the Deaf community. Glickman (1993) suggests that the process of developing a Deaf identity involves moving from the

hearing majority's view of deafness, which focuses on a medical/audiological disability conception, to a cultural community view of deafness.

When viewed from a sociocultural perspective, the features that characterize the Deaf community are similar to those that characterize other cultural communities (Reagan, 1995). Chief among these is a shared language, which in the U.S. Deaf community is American Sign Language (ASL). Reagan (1995) argues that “the single most significant element of Deaf cultural identity is, without question, competence in ASL” (p. 243). For the Deaf community, ASL not only provides a means of communicating, but also serves as “a marker of ‘group solidarity’ and a means of identification of group members” (Reagan, 1995, p. 243).

The Deaf community also is characterized by shared beliefs, values, and traditions, many of which stem from the shared experience of being deaf in a world dominated by people who hear (Andrews, 2006). Deaf culture is highly visual, and the community's cultural values include a deep appreciation for ASL; ASL poetry, stories, and jokes; Deaf art; and Deaf history and folklore (Andrews, 2006). Fighting against the dominance, control, and oppression of the hearing world is a central theme in Deaf culture (Padden & Humphries, 2005). For example, the National Association of the Deaf engages in a variety of efforts to educate people about deafness and Deaf culture and to advocate for the civil rights of deaf people (NAD, n.d.). The NAD also works to fight discrimination and influence legislation and public policy to ensure equal access and equal opportunities for people who are deaf or hard of hearing (NAD, n.d.)

Another central feature of the Deaf community is a shared sense of deafness as a sociocultural rather than audiological phenomenon (Reagan, 1995). In the view of those

who are Deaf, “audiological deafness is neither a necessary nor sufficient condition for cultural deafness” (Reagan, 1995, p. 244). Thus, hearing individuals, such as children whose parents are Deaf, can be members of the Deaf community. Conversely, individuals who grew up hearing and lost their hearing as older adults are not members of the Deaf community (Reagan, 1995). Those who are members of the Deaf community, whether they are hearing or deaf, have a social, political, and cultural affiliation with the Deaf community (Leigh, 2009). They use ASL; do not view deafness as a deficit or disability; and share the beliefs, values, and traditions of the culturally Deaf community (Reagan, 1995).

DID theory presumes that a deaf or hard-of-hearing person’s understanding of him or herself as a member of the culturally Deaf community develops in stages and that those stages are predictable, distinct, and identifiable (Glickman, 1993). The theory attempts to describe the attitudes and beliefs that characterize each stage of the process and to explain the differences between the identities and world views of those who are Deaf and those who are part of the hearing majority. The theory proposes four types of deaf identities: culturally hearing, culturally marginal, immersion, and bicultural (Glickman, 1993).

Deaf and hard-of-hearing individuals with a culturally hearing orientation are defined as those who endeavor to function as hearing people in attitude, behavior, and communication mode (Glickman, 1993). They maintain the perspective of the hearing majority, seeing their deafness as a medical condition to be overcome. Individuals who are culturally hearing do not use sign language, and they tend to shun contact with others who are deaf and see no reason to affiliate with the Deaf community (Glickman, 1993).

People with a culturally hearing orientation generally are those who experience their hearing loss after adolescence (Glickman, 1993). They grow up hearing and see their deafness as a tragic loss. They strive to maintain the culturally hearing perspective they possessed prior to losing their hearing. Individuals who are culturally hearing may make a conscious effort to minimize the role of deafness in their identity. According to DID theory, those who are unable to maintain their culturally hearing identity move into the culturally marginal stage of Deaf identity development (Glickman, 1993).

Individuals who are culturally marginal are ambivalent about their deafness and about whether to adopt a hearing or Deaf cultural frame of reference (Glickman, 1993). They continually shift back and forth between conflicting positive and negative attitudes about both hearing and Deaf identities. Glickman (1993) uses the term “marginal” because he views culturally marginal individuals as operating on the margins of both hearing and Deaf cultures without being members of either culture. Culturally marginal individuals lack strong communication skills in either English or ASL and are unable to adapt their communication appropriately to a given situation. They often find it difficult to develop and sustain relationships with either hearing or Deaf people, and this can lead to a sense of isolation. Identity confusion leads those who are culturally marginal to feel as though they do not fit in anywhere (Glickman, 1993).

People with a culturally marginal perspective generally are deaf and hard-of-hearing individuals who grow up in hearing families and define themselves in relation to their conception of what it means to be hearing (Glickman, 1993). Culturally marginal is the first stage in development of a Deaf identity for the majority of deaf and hard-of-hearing individuals born into hearing families. Unlike those who are born hearing and

later experience hearing loss, individuals born deaf into hearing families lack a well-formed prior identity. According to Glickman, they exist in a state of marginality or identity confusion from the beginning. Thus, when they move from a marginal identity to immersion, they are forming an identity for the first time (Glickman, 1993).

To move into the immersion stage of deaf identity development, an individual must be exposed to the culturally Deaf community and begin to adopt the community's values and beliefs (Glickman, 1993). Those with an immersion identity become proud of their deafness and have a high level of involvement with the Deaf community, idealizing Deaf culture and disparaging the hearing world. They want to immerse themselves in deafness, enthusiastically embracing everything connected with the Deaf community. Individuals with an immersion identity see deafness strictly as a cultural phenomenon, not as a disability. They revere ASL as the proper and natural language of Deaf people and reject English, seeing no reason for Deaf people to use spoken English, regardless of the situation or context. Anger often characterizes an immersion identity, and often that anger is directed at hearing people. Those with an immersion identity tend to believe that only Deaf people should educate, advise, or lead other Deaf people. As a person progresses through immersion, they begin to feel less like they have to be "anti-hearing" in order to be "pro-Deaf," and this leads them toward a bicultural orientation (Glickman, 1993, p. 99).

A bicultural identity is the final stage in the development process (Glickman, 1993). Those with a bicultural identity are proud of their deafness, but are comfortable in both the Deaf and hearing worlds. They have a cultural view of deafness and are deeply connected to the Deaf community, but they have a balanced perspective. Individuals who

are bicultural are able to reject paternalistic and oppressive attitudes of the hearing majority without rejecting hearing people themselves. They respect and appreciate both ASL and English and recognize the strengths and weaknesses of both the hearing world and the Deaf world. While becoming bicultural is the final stage for those who go through the deaf identity development process, DID theory postulates that individuals who are born deaf into Deaf families, generally are bicultural from childhood because they grow up in an environment where deafness and sign language are norms, and they learn from an early age how to interact with individuals who are hearing (Glickman, 1993).

It is important to point out that, while DID theory is helpful in providing an understanding of the range of deaf identities, it does not consider the influence of social context on identity (Ohna, 2004). The theory does not account for the possibility that an individual's attitude, behavior, and other components of their identity may shift in various social situations (Maxwell-McCaw, Leigh, & Marcus, 2000). In addition, the theory is prescriptive, presuming that the goal for a deaf person should be to achieve a bicultural identity (Ohna, 2004).

An acculturation view of deaf identity perhaps provides a more comprehensive picture because acculturation involves psychological and behavioral change within a sociocultural context (Maxwell-McCaw & Zea, 2011). This alternate view of deaf identity development is based on the acculturation of immigrant groups to their new country (Maxwell-McCaw, Leigh, & Marcus, 2000). The acculturation perspective sees the identity development process as bilinear and multidimensional, with individuals taking on some aspects of their new culture while retaining aspects of their culture of

origin, rather than as a strictly linear progression whereby individuals take on dimensions of their new cultural group while rejecting their culture of origin (Maxwell-McCaw & Zea, 2011). Thus, an acculturation view of identity development is useful because a person's association with one culture does not necessarily preclude her from also being associated with another culture (Maxwell-McCaw & Zea, 2011).

DID theory and deaf acculturation offer different ways of conceptualizing the process of identity development, but both posit four possible deaf identities, as already described: one that emphasizes a hearing cultural orientation, one that emphasizes a Deaf cultural orientation, one that is bicultural, and one that is marginal. This conceptualization of a range of deaf identities provides an important theoretical construct for examining deaf and hard-of-hearing students' selection of a DSI. It may be that students who already identify with the culturally Deaf community may wish to attend a college with other students who share their culture. Those who do not already identify with the culturally Deaf community may want the opportunity that a DSI provides to become involved in the Deaf community and explore their own identity as a culturally Deaf person. There is little empirical research, however, on what factors lead deaf and hard-of-hearing students to choose DSIs and whether or how Deaf identity influences college choice. Moreover, there is scant literature on any aspect of the college choice process of students who are deaf or hard of hearing.

### **Research Questions**

The present study enhances the body of knowledge in the college choice field by helping to illuminate the college choice processes of a unique group—the deaf and hard-of-hearing population. The study investigated the factors that influence deaf and hard-of-

hearing students' college choice, and explored how deaf identity influenced students' selection of a DSI. The study addressed these questions:

- How do deaf and hard-of-hearing students describe the factors that influenced their college choice?
- In what ways does a deaf or hard-of-hearing student's deaf identity influence the selection of a DSI?

### **Summary**

Students with disabilities, including those who are deaf or hard of hearing, are participating in postsecondary education at increasing rates (Newman, Wagner, Cameto, Knokey, & Shaver, 2010). The benefits of postsecondary education for individuals who are deaf or hard of hearing include, among others, lower rates of unemployment and higher wages (Walter, 2010). Given the benefits of enrolling in and completing college, it is important to understand the process deaf and hard-of-hearing individuals use in deciding whether and where to attend college. Such an understanding could help guide student decision-making regarding postsecondary education, which is important because the college a student chooses could ultimately mean the difference between persisting and dropping out (Braxton, Vesper, & Hossler, 1995).

The current study is presented in five chapters. This first chapter provided background on college choice, the postsecondary options available to the deaf and hard-of-hearing student population in the United States, and the role of MSIs. It also provided an overview of deaf identity development as a theoretical lens through which to examine the college choice process of deaf and hard-of-hearing students. This chapter concludes with a glossary of terms relevant to this study. Chapter 2 provides a selective review of

the extant literature on college choice, and Chapter 3 describes the methodology and analytical procedures that were used in the study. Chapter 4 outlines the study findings, and Chapter 5 provides a discussion of the findings and their implications as well as limitations of the study and recommendations for future research.

### **Definition of Terms**

The following is a list of key terms used throughout this study.

- Cochlear implant: A cochlear implant is a surgically implanted electronic device designed to produce hearing sensations by electronically stimulating nerves in the inner ear (U.S. FDA, 2010).
- College choice: College choice is the process by which students decide whether and where to attend college (Bergerson, 2009).
- Deaf: The upper case Deaf is a label used to refer to those who have a social, political, and cultural affiliation with the Deaf community (Leigh, 2009).
- Deaf and hard of hearing: The term “deaf and hard of hearing” is used to describe the population of individuals who have some level of hearing loss (Walter, 2010).
- Deaf identity development: The term “deaf identity development” refers to the process whereby a deaf or hard-of-hearing person comes to understand him or herself as being a member of the culturally Deaf community (Glickman, 1993).
- Deaf-serving institution (DSI): For the purposes of this study, a DSI refers to a postsecondary institution founded by the U.S. Congress and funded by the federal government to serve deaf and hard-of-hearing students.
- Hispanic-serving institutions (HSIs): HSIs are defined as degree-granting institutions with a full-time-equivalent undergraduate enrollment of 25% or more

Hispanic students, while students in each other minority group comprise less than 25% of the total enrollment (Li & Carroll, 2007).

- Historically Black colleges and universities (HBCUs): HBCUs are identified by law as degree-granting institutions established before 1964 with the principle mission of educating African American students (Li & Carroll, 2007; Staten et al., 2009).
- Minority-serving institution (MSI): An MSI is an institution that enrolls a high proportion of students from a given minority population (O'Brien & Zudak, 1998; Staten, et al., 2009).
- Predominantly White institution (PWI): A PWI is a mainstream college or university that serves primarily White students (Freeman, 1999).
- Self-contained classroom: A self-contained classroom is a term used to describe classes with only deaf students that are situated within a mainstream high school.
- Tribal colleges and universities (TCUs): TCUs are postsecondary institutions designated as such by law to serve American Indian students (Li & Carroll, 2007).

## Chapter 2: Literature Review

### Introduction

The relationship between college choice and college completion points to a need to better understand how deaf and hard-of-hearing students decide which college to attend. This is particularly important in the current environment as an increasing number of deaf and hard-of-hearing students are electing to participate in postsecondary education (Newman, Wagner, Cameto, Knokey, & Shaver, 2010). The present study enhances the body of knowledge in the college choice field by addressing these questions:

- How do deaf and hard-of-hearing students describe the factors that influenced their college choice?
- In what ways does a deaf or hard-of-hearing student's deaf identity influence the selection of a DSI?

The college choice literature provides context for understanding deaf and hard-of-hearing students' college-related decision-making. Because deaf and hard-of-hearing students can be viewed as members of a "cultural and linguistic minority" (Reagan, 1995), an understanding of the college choice experiences of students from individual minority populations as well as the experiences of a broader range of students is helpful in situating the experiences of those who are deaf or hard of hearing. Also instructive in the context of the present study is a review of the literature related to identity and sociocultural influences on college choice as well as the role of minority-serving

institutions (MSIs), which includes those created specifically to serve deaf and hard-of-hearing students.

What follows is a review of recent empirical literature on college choice. This review begins with a general overview of the field and then moves to an analysis of recent studies that investigate the factors that influence college choice and how those factors differ across various populations and/or differentially affect students who are members of various populations. Also included is a review of the scant literature on the college choice processes of individuals who are deaf or hard of hearing. A review of the literature on identity and sociocultural influences on college choice and the role of MSIs is provided as well. The chapter concludes with a summary.

### **Overview of the College Choice Field**

In the 1970s and 1980s, college choice research focused on examining the influence of student, institutional, and environmental characteristics on college selection (Paulsen, 1990). Studies in that period largely were driven by changes in the higher education marketplace as postsecondary institutions in the United States sought strategies for dealing with a challenging national economy and projected reductions in the nation's traditional college-age student population (Paulsen, 1990). Macro-level studies were conducted to examine postsecondary enrollment trends at institutional, state, regional, and national levels (Paulsen, 1990). Micro-level studies focused on analyzing the factors that influenced individual students' college choices (Paulsen, 1990). In his review of the literature from that period, Paulsen (1990) found that most studies were conducted from a sociological, psychological, or economic perspective. Researchers taking a sociological view examined college enrollment from a status-attainment perspective, exploring the

factors that influence students' educational aspirations and predisposition to attend college. Those studying college choice from a psychological perspective focused on student-institution fit and how college experiences and environments affected student enrollment decisions. Researchers taking an economic approach focused on college selection as an investment-decision process (Paulsen, 1990).

In the 1980s, researchers began developing and testing models to enhance understanding of the college choice process (Paulsen, 1990). Chief among them was Hossler and Gallagher's (1987) three-stage model, which became perhaps the most widely cited college choice process model and a starting point for many scholarly studies (Bergerson, 2009). Hossler and Gallagher developed their model by synthesizing a number of studies in the college choice literature. They defined the three phases of the college decision-making process as predisposition, search, and choice. In the predisposition phase, students determine whether or not they want to attend college. Factors such as students' socioeconomic status and academic ability as well as the attitude and support of their parents influence this stage of the process. In the search phase, students begin seeking more information about colleges and develop a choice set—a group of institutions in which they are interested. Socioeconomic status, academic ability, and their parents' education level are factors that influence this stage of the process. In the final stage, the choice phase, students evaluate the institutions in their choice set and narrow their options, culminating in an enrollment decision. Factors influencing this stage are students' perceptions of institutional quality and the level of financial aid a given institution offers (Hossler & Gallagher, 1987).

In the 1990s, researchers began questioning whether broad models such as Hossler and Gallagher's (1987) could effectively predict or explain the college choice processes of all students. Since that time, a major trend in the field has been a movement away from the development and testing of broad models in favor of examination of the experiences of groups of students with diverse backgrounds, with the goal of enhancing access and equity in higher education for traditionally underrepresented populations (Bergerson, 2009). Access and equity in postsecondary education have been significant themes in college choice research for the past two decades. In her review of the literature, Bergerson (2009) identified an additional trend—a movement toward studying how preparation for college, including academic preparation and access to information, influences college choice. Bergerson also identified an emphasis on examination of state and federal policies and how they affect students' access to higher education.

The review of selected recent studies that follows provides examples of these trends in the college choice field, with an emphasis on the factors influencing students' college selection. Factors identified include student and family characteristics, postsecondary institution characteristics, and policy influences. The review begins with an analysis of recent studies that have explored how student and family characteristics affect students' college-related decision-making. The studies included here demonstrate the importance of examining the factors that influence the college choices of students from various populations to better understand the similarities and differences between and among groups. This supports the need for the present study, which explored the factors influencing deaf and hard-of-hearing students' college choices to help illuminate the experiences of this unique population.

## **Influence of Student and Family Characteristics on College Choice**

Among the recent studies in the literature are those that examine the influence of student and family characteristics on college choice. These studies have looked at the college choice processes of a range of students to identify differences among various populations. This line of inquiry has sought to provide greater access to postsecondary education for students, particularly those from underrepresented populations.

**Race-related differences in college choice.** A number of recent studies in the literature have investigated race-related differences in students' college-related decision-making. An example is a study by Engberg and Wolniak (2009) who analyzed admissions and financial aid data from eight private four-year colleges in the Northeast, Southeast, and Midwest regions of the United States to determine race-related differences in the factors that influenced students' decisions to attend a particular institution. The study sample included 16,207 students, the gender distribution of which was 59% female and 41% male. The racial distribution of the sample was 77% White, 10% Asian, 8% Black, and 5% Latino. The mean high school grade-point average (GPA) of participants by racial group was 3.67 for Asian students, 3.50 for White students, 3.49 for Latino students, and 3.40 for Black students. Mean SAT scores were 1328.84 for Asian students, 1199.51 for White students, 1185.03 for Latino students, and 1121.08 for Black students (Engberg & Wolniak, 2009).

The researchers conducted *t* tests to determine whether there were significant mean differences between White students and students in the other racial groups on a range of characteristics, including those associated with the students themselves as well as those associated with the high schools the students attended (Engberg & Wolniak,

2009). Looking at mean expected family contribution (EFC), which relates to financial need (with those with higher EFCs having less need for financial aid), the study found that Asian students' mean EFC (\$64,288) was significantly ( $p < .001$ ) higher than White students' mean EFC (\$59,624), while Black students' mean EFC (\$37,643) was significantly ( $p < .001$ ) lower. No significant difference was found between Latino students' EFC (\$56,227) and that of White students (Engberg & Wolniak, 2009).

The study also found differences between the mean academic profile indexes (APIs) of White students and students in the other racial groups (Engberg & Wolniak, 2009). Students' APIs were calculated based on a composite of their high school GPA, percentile rank, and SAT score. Raw scores were segmented for each component into deciles and assigned equal weight to achieve an API of 1-10 for each student. In analyzing the mean APIs for each group, Engberg and Wolniak (2009) found that Asian students' API (6.821) was significantly ( $p < .001$ ) higher than the mean API of White students, while the mean API of Black students (4.624) was significantly ( $p < .001$ ) lower than that of White students (5.426). No significant difference was found between the mean API of Latino students (5.294) and that of White students (Engberg & Wolniak, 2009).

In addition, the study measured the effect of high school quality on students' college choices (Engberg & Wolniak, 2009). The researchers created a composite measure of the overall academic quality of a student's high school, which included the school's average standardized test scores, percentage of advanced placement (AP) test takers, the number of AP test takers scoring a three or higher, and the percentage of college-bound seniors at the school. In analyzing the high school quality measure for

each racial group, the mean quality measure of Asian students' high schools (0.818) was found to be significantly greater than that of White students' high schools (0.778), while the mean quality measure of Black students' high schools (0.624) was significantly lower than that of White students' high schools. The study also revealed that the mean quality measure of Latino students' high schools was equal to that of White students' high schools (Engberg & Wolniak, 2009).

Another factor examined in the study was the racial composition of students' high schools (Engberg & Wolniak, 2009). The researchers determined the percentage of students of color in each of the high schools attended by the students in the sample population and then calculated the mean percentage for each racial group. Results showed that White students attended high schools with the lowest percentage of students of color (mean: 20.683) and that Black, Latino, and Asian students were significantly more likely to have attended high schools with higher mean percentages of students of color. The mean percentage of students of color in schools attended by Black students was 42.293. It was 32.883 in schools attended by Latino students, and 27.694 in schools attended by Asian students (Engberg & Wolniak, 2009).

The researchers then used logistic regression to conduct a multivariate analysis to determine how students' background and high school characteristics affected their likelihood of enrolling in one of the eight colleges participating in the study (Engberg & Wolniak, 2009). The logistic model was run on the entire sample to determine the effectiveness of one model of college choice, and then run separately for White, Black, Asian, and Hispanic students to determine whether different models explain college choice for students in different racial groups. The analysis showed that Asian, Black, and

Latino students were significantly less likely than White students to enroll in the colleges included in the study. The analysis also showed that White and Asian students were more likely than Black students to attend more prestigious/selective institutions (Engberg & Wolniak, 2009).

The findings of this study demonstrate that there are a variety of factors that influence students' college choices and that there are significant race-related differences in these factors (Engberg & Wolniak, 2009). The researchers argue that their findings suggest that students' college choice processes vary based on their race, and that, therefore, there can be no common model that explains the college choice processes of all students. This supports the contention of researchers like Freeman (2005) and Muhammad (2006, 2008) who argue that broad models that emphasize college choice as a cognitive process do not adequately explain the college choice processes of students for whom sociocultural influences also must be considered. The findings from Engberg and Wolniak's (2009) study also support the need to explore factors influencing deaf and hard-of-hearing students' college choices to further understand the experiences of different student populations in the college choice process. A limitation of Engberg and Wolniak's study is that it only examined enrollment data from eight private colleges in three regions of the United States. As a result, the findings are not generalizable across other student populations or institutions.

Continuing their exploration of race-related differences in the factors influencing students' college choices, the same researchers conducted a subsequent study that included a broader range of students and postsecondary institutions (Engberg & Wolniak, 2010). In that study, Engberg and Wolniak (2010) analyzed data from the Educational

Longitudinal Survey of 2002 on a nationally representative sample of 11,940 high school seniors from 740 schools across the United States to again examine how student-level and high school-level characteristics influence students' participation in higher education. Study participants were divided into three groups: those who selected a two-year postsecondary institution following high school, those who selected a four-year institution, and those who did not enroll in higher education. Of those who enrolled in a two-year college, 52% were female and 48% were male. The racial composition of this group was 59% White, 20% Hispanic, 13% Black, 4% Asian, and 4% biracial. Of those who enrolled in a four-year college, 54% were female and 46% were male. The racial composition of this group was 69% White, 12% Black, 9% Hispanic, 6% Asian, and 4% biracial. Of those who did not enroll in college following high school, 57% were male and 43% were female. The racial composition of this group was 52% White, 22% Hispanic, 17% Black, 3% Asian, and 6% biracial (Engberg & Wolniak, 2010).

Using a two-level hierarchical general linear model, the study identified a number of significant student- and school-based factors that predict enrollment in two- or four-year institutions, as compared with no enrollment in postsecondary education (Engberg & Wolniak, 2010). The study found that students were more likely to attend a two- or four-year college as their socioeconomic status increased. Students' likelihood of attending college also increased as their GPAs increased, with those with higher GPAs being more likely to attend four-year institutions than two-year institutions. The desires of family and friends for students' to attend college also increased the likelihood of college attendance. Another factor that increased the likelihood that students would attend college was

whether students discussed their school and college plans with their parents (Engberg & Wolniak, 2010).

With regard to school-level characteristics, the study found that as the average socioeconomic status of a high school increased, so did the likelihood that students from that school would attend college, with students who attended schools with higher average SES status being more likely to attend four-year schools than two-year schools (Engberg & Wolniak, 2010). Similarly, as a school's average GPA increased, so, too, did the likelihood that students from that school would attend college. The study also found that the likelihood of students from a given school attending college increased as the average number of parents involved in school-based organizations increased (Engberg & Wolniak, 2010).

The results of the study help further illuminate and confirm some of the factors that influence college enrollment. As in their 2009 study, Engberg and Wolniak's 2010 study showed that SES, academic ability, and quality of high school attended are factors in college choice. Both studies also demonstrate how factors such as these differentially impact the college choices of students from various racial and ethnic groups, which again points to the importance of studying the college choice processes of students with diverse backgrounds and supports the need for the present study, which examined the factors that influence deaf and hard-of-hearing students' college choices.

**Differences in institution type.** Other recent studies also support the findings that academic aptitude and SES are among the factors that influence college choice. For example, Joshi, Beck, and Nsiah (2009) analyzed data from the National Longitudinal Survey of Youth (NLSY97) to determine the factors that influence students' decisions to

choose colleges offering two-year, rather than four-year degree programs. The study sample included 2,295 students, of which, 42.6% were male, and 57.4% were female. The racial distribution of the sample was 64.6% White, 22% African American, 6% Hispanic, and 7.4% of other races. The study looked at the academic aptitude of participants as measured by students' performance on three subtests of the Armed Services Vocational Aptitude Battery, the number of hours participants worked per week, the background of the students' families as measured by parental income level, and the region (Northeast, South, West, or North-Central) in which students lived (Joshi et al., 2009).

The study found that academic aptitude was a key factor in students' college choices and that those with higher academic aptitude were more likely to choose four-year colleges (Joshi et al., 2009). This is consistent with the findings of Engberg and Wolniak (2009, 2010), but each study used different measures for determining academic aptitude. Joshi et al. (2009) also found that the number of hours students worked was a significant factor in their college choice, with those who work a low number of hours (defined as 1-20 hours per week) being more likely to choose a four-year college, and those who work a high number of hours (defined as greater than 40) being more likely to choose a two-year college. Another finding was that parents' income level affected students' college choices, with those whose parents had medium (defined as \$30,000 to less than \$60,000) or higher income levels (defined as \$60,000 or greater) more likely to attend four-year colleges. This finding also is consistent with Engberg and Wolniak's (2009, 2010) findings that SES influences college choice. In addition, Joshi et al. found that female students were more likely than male students to choose a four-year college,

and that those who are White were more likely than those of other races to choose a four-year college. Finally, the study found that students from the North-Central, Southern, and Northeastern regions of the United States were more likely than those from the West to choose a four-year college. The researchers argue that the results of their study suggest the need to provide adequate financial aid to ensure that students from families with lower incomes can pursue higher education (Joshi et al., 2009).

**Differences in institutional prestige.** Another study continued the exploration of factors that influence college choice. Stearns, Potochnick, Moller, and Southworth (2010) analyzed data from the National Education Longitudinal Study 1988-1994 (NELS) to explore the relationship between students' race, high school course-taking, and the prestige of the colleges they attended. The researchers used a sample of 2,660 students who attended a four-year institution immediately following high school. The sample comprised 78% White students, 10% Asian students, 7% Black students, and 6% Latino students. Slightly more than half (54%) of the sample was female. The mean GPA for students in the study was 2.90 (Stearns et al., 2010).

Students in the study were placed into three categories based on the rigor of their high school coursework: low course intensity (27% of the sample), middle course intensity (30% of the sample), and high course intensity (43% of the sample) (Stearns et al., 2010). The prestige of the colleges students attended was measured based on the institutions' selectivity as evidenced by the SAT score range of students in the 75<sup>th</sup> percentile of the colleges' fall 1990 freshman class. The study found that on average, Black and Latino students attend less selective postsecondary institutions than White students do. After controlling for a variety of variables, including SES, GPA, and, in the

case of Black students, attendance at historically Black colleges and universities (HBCUs), which the researchers say tend to be less selective, on average, than other institutions, the study found that Black and Latino students taking high intensity coursework in high school were more likely than White students to enroll in more prestigious (higher selectivity) colleges. Stearns et al. (2010) contend, therefore, that their findings suggest that Black and Latino students can overcome the college selectivity gap by working hard and pursuing a more rigorous course of study in high school.

**Location-related differences in college choice.** In addition to influencing the type and prestige of the college students select, student and family characteristics also can influence the location of the college students choose to attend. Mattern and Wyatt (2009) used data from the National Student Clearinghouse (NSC) and the College Board to determine the median distance students travel from home to attend college, and to determine what effect student and family characteristics have on the distance that students travel. The NSC tracks student enrollment and degree attainment for more than 3,100 U.S. institutions of higher education, which covers 91% of the college-going population in the country. The researchers matched these data with College Board data, resulting in a sample of 916,466 students (Mattern & Wyatt, 2009).

Using zip codes for each college obtained from the College Board's Annual Survey of Colleges, the researchers calculated the distance between a student's home and the college he or she attended, and found that the median distance students traveled was 94 miles, while the mean was 286 miles (Mattern & Wyatt, 2009). More than a quarter of the students in the sample (26%) attended a college within 25 miles of their home, 51.4% within 100 miles of their home, and 75.7% within 250 miles from their home. The study

also found that 72.1% of students attended a college in their home state, 11.9% in a bordering state, and 16% in a non-bordering state (Mattern & Wyatt, 2009).

The researchers then analyzed a subset of the sample, comprising 697,610 students for whom they had demographic and academic information (Mattern & Wyatt, 2009). The results showed that students with higher SAT scores and high school GPAs (HSGPA) were more likely than other students to travel further from home to attend college. The median distance traveled for students with SAT scores of 400-490 was 42 miles, while the median distance for those scoring 1500-1600 was 234 miles. The median distance traveled by those with HSGPAs lower than letter grade C was 64 miles, while the median distance traveled by those with A+ HSGPAs was 118 miles (Mattern & Wyatt, 2009).

The study also found that students whose parents had higher levels of income and higher levels of education were more likely than other students to travel further from home to attend college (Mattern & Wyatt, 2009). The median distance traveled by those whose family income was less than \$30,000 was 63 miles, while the median distance traveled by those whose family income was more than \$100,000 was 150 miles. The median distance traveled by those whose parents had less than a high school diploma was 28 miles, while the median distance traveled by those whose parents had graduate or professional degrees was 130 miles (Mattern & Wyatt, 2009).

In looking at racial/ethnic differences, the study found that the median distance traveled for American Indians, White students, and Black students were similar at 103, 102, and 98 miles, respectively, and that Asian American and Hispanic students were more likely to travel shorter distances for college, with median distances of 60 and 39

miles, respectively (Mattern & Wyatt, 2009). The study also showed that the median distance traveled by female students was 55 miles, while the median distance traveled by males was 101 miles. Mattern and Wyatt's (2009) findings that factors such as race, SES, and academic aptitude influence college choice are consistent with those of Engberg and Wolniak (2009, 2010); Joshi et al. (2009); and Stearns et al. (2010). While not many of the other studies reviewed thus far have considered gender influences on college choice, Mattern and Wyatt's findings that there are gender-based differences in students' college choices is consistent with the findings of Joshi et al. A strength of Mattern and Wyatt's finding in this area is that their study sample was nationally representative while the sample used by Joshi et al. was not.

**Hispanic students and college choice.** The studies reviewed thus far have examined heterogeneous student populations to compare differences among various racial and ethnic groups. Other researchers also have looked at heterogeneous populations, but with the goal of highlighting inequities for a single population. For example, O'Connor (2009) used a logistic regression model to analyze the relationship between SES and the over-representation of Hispanic students in community colleges. She used data from the National Educational Longitudinal Study of 1988 (NELS), which provided a national sample of 11,437 individuals who had attended college at any point before 2000. Of these, 9,074 were White, 1,198 were Black, and 1,165 were Hispanic. In addition to SES, O'Connor included the following variables: high school GPA and diploma acquisition, educational expectations (bachelor's degree or less than a bachelor's degree), family size, and dominant language.

The study found that Hispanic students had the lowest SES compared to White and Black students (O'Connor, 2009). The analysis also showed that Hispanic and Black students had similar GPAs, both of which were lower than that of White students. Hispanic students were the least likely of the three racial groups to have a high school diploma and significantly less likely than Whites and Blacks to come from English-language households. Hispanic students were most likely to come from larger families (an average of 5.2 siblings as compared to White and Black families, with an average of 4.5 and 4.7 siblings, respectively). When controlling for all of these variables, O'Connor (2009) still found that Hispanic students were significantly less likely to attend four-year colleges than Black or White students. The results also showed that while higher SES positively affected all three racial groups, it had a lower positive effect on Hispanics than on Blacks and Whites. O'Connor suggests that the reason for this may be a lack of information about higher education among Hispanic students and their parents. O'Connor argues that it is necessary to find ways to effectively communicate about higher education with the Hispanic community in order to enhance access to college for Hispanic students.

The same researcher partnered with two others to continue investigating the reasons for the over-representation of Hispanic students in community colleges. As in O'Connor's (2009) study, O'Connor, Hammock, and Scott (2010) used data from the National Educational Longitudinal Study of 1988 (NELS). The study sample included 4,989 individuals whose academic background qualified them to attend college, who aspired to complete at least a bachelor's degree, and who had attended college at any point before 2000. Of these, 4,213 were White, 436 were Hispanic, and 340 were Black,

though this latter group was removed in later stages of the analysis. The researchers included the following variables in their analysis: SES; GPA; geography, and in particular, whether an individual resided in a state with a large Hispanic population, which the researchers termed an SHS (strong Hispanic state); and social capital, as indicated by knowledge of college finances, which were associated with parent and student actions to find out about financial aid and whether or not parents had saved money for their child's college education (O'Connor et al., 2010).

The study found that Hispanic students were more likely than White students (37.9% vs. 25.4%) to begin their college education at a community college (O'Connor et al., 2010). The results also showed that Hispanic students were less likely than White students (55.8% vs. 62.6%) to transfer from community colleges to four-year colleges, and that White students had a 40% higher bachelor's degree completion rate than Hispanic students. Consistent with O'Connor's (2009) findings, O'Connor et al. (2010) found that Hispanic students had lower SES and GPAs, on average. The study also found that the parents of Hispanic students were less likely to save money for college or seek information about financial aid. However, Hispanic students were more likely to seek financial aid information themselves than White students (O'Connor et al., 2010).

The study also showed that living in an SHS had a negative effect on Black and White students' enrollment in four-year institutions, but not on Hispanic students (O'Connor et al., 2010). In addition, while higher SES positively affected all three racial groups, it had a lower positive effect on Hispanics than on Blacks and Whites. Another finding was that White students whose parents did not save money for their college education were more likely than Hispanic students to attend a four-year college. The

findings of O'Connor et al. are consistent with all of the other studies reviewed thus far (i.e., Engberg & Wolniak, 2009, 2010; Joshi et al., 2009; Mattern & Wyatt, 2009; O'Connor, 2009; and Stearns et al., 2010), in demonstrating that factors such as race and SES influence college choice. The study's findings also demonstrate how various factors can differentially impact the college choices of students from diverse groups, which again points to the importance of studying deaf and hard-of-hearing students' college choice process to determine the factors that influence their college-related decision-making.

**African American students and college choice.** Other studies have continued the line of research that examines factors that influence students from individual minority populations. Muhammad (2008) used data from the National Educational Longitudinal Survey (NELS) of 1988 to determine the effect of SES, academic ability, participation in extracurricular activities, and support of family, teachers, coaches, counselors, and peers on African American students' intention to go to college. The 1988 NELS incorporates data on a nationally representative sample of 25,000 students who were in eighth grade in 1988 and tracks them through four follow-up surveys in 1990, 1992, 1994, and 2000. The sample Muhammad selected for her study included 941 African American students.

Using multiple regression analysis, the study found that the support of parents, especially mothers; school counselors; and peers accounted for 28% of the variance in African American students' intention to attend college (Muhammad, 2008). The results also showed that participation in extracurricular activities had a significant positive effect on plans to attend college, while SES; academic ability; and the support of teachers, coaches, and family members other than parents were not significant factors in predicting students' intention to participate in postsecondary education. Muhammad's (2008)

findings that SES and academic ability were not significant factors in students' intention to go to college are contrary to the findings of other studies included in this review (e.g., Engberg & Wolniak, 2010; Joshi et al., 2009; Mattern & Wyatt, 2009). Muhammad suggests that the reason for her finding with regard to SES may be that African American students' predisposition to attend college may not vary much across the SES range, and that the reason for her finding regarding academic ability is that test scores reveal little difference in ability between African American males and females. Muhammad concedes, however, that both her findings on SES and academic ability warrant further study.

**A qualitative view of college choice.** The studies reviewed thus far all have employed quantitative methodologies, which has been the dominant method of inquiry in the college choice field (Bergerson, 2009). Some college choice researchers, however, have employed qualitative methodologies to provide a more in-depth exploration of the college choice experiences of students, particularly those from minority populations. Gildersleeve (2010), for example, used a life history narrative to illustrate the college choice process of undocumented Latino students, with the goal of encouraging admissions professionals to better understand Latino students and better assist them in accessing higher education.

Using data collected over four years through extensive interviews and encounters with four undocumented male Mexican immigrant high school students in California, Gildersleeve (2010) created a single composite life history of a fictional undocumented student, Carlitos, to illustrate the common experiences of the four real students. Gildersleeve presented six significant experiences in Carlitos' life: extreme poverty in his

home country; lack of formal education in his home country due to the need to work to help support his family; abuse by an extended family member; his arduous journey to cross the border and enter the United States; the challenges, joys, and promise of K-12 education in the United States; and the realization that a college education presents a path to a more prosperous future, but that access to college is constrained by cost, his undocumented status, and his need to continue working to help support his family. Through his presentation of Carlitos' life history, Gildersleeve illustrates how family, work, and education all influence undocumented students' access to, desire for, and decisions about college. Gildersleeve's study also demonstrates how a qualitative research design can help illuminate the unique college choice experiences of students from diverse populations. This supports the research design for the present study, which explored deaf and hard-of-hearing students' college choice processes using a qualitative phenomenological approach.

The studies included in this section have primarily taken a sociological perspective on college choice, examining how a variety of factors influence students' educational aspirations and predisposition to attend college (Paulsen, 1990). These factors can influence whether or not students attend college at all, and if they do, what type of college they attend. Student and family characteristics such as SES, academic ability, family and peer support, and quality of high school attended can influence whether students attend a two-year or four-year college. Such factors also can affect the prestige and quality of the institutions students attend as well as the distance from home that they travel to attend college.

The studies in this section also have demonstrated how student and family characteristics can differentially impact the college choices of students who are members of various racial and ethnic groups. This affirms the importance of examining the factors that influence the college choices of students from various populations to better understand the similarities and differences between and among groups. This, in turn, supports the need for the present study, which explored the factors influencing deaf and hard-of-hearing students' college choices to help illuminate the experiences of this unique population.

### **Influence of Institutional Characteristics on College Choice**

While the studies included in the previous section focused primarily on the influence that various student and family characteristics can have on college choice, another line of research has examined how various characteristics of postsecondary institutions and other external factors influence students' college choice processes. One example is a study by Herren, Cartmell, and Robertson (2011), who invited a random sample of 1,484 students attending the College of Agricultural Sciences and Natural Resources (CASNR) at Oklahoma State University (OSU) to participate in an online survey in order to identify the recruitment initiatives and institutional characteristics that had influenced those students. A total of 339 students completed the survey. The majority of respondents (61.1%) were female. The median age of respondents was 21.3, with a standard deviation (SD) of 3.94. The class rank distribution of the respondents was 36% seniors, 27.1% juniors, 15.6% sophomores, and 20.1% freshmen, with 1.2% not providing their class rank (Herren et al., 2011).

The researchers asked participants to use a scale of 1 (“not useful”) to 5 (“very useful”) to rank how helpful they found 28 information sources to be during their college selection process (Herren et al., 2011). The information source ranked most useful (mean rating: 3.95, SD: 1.24) was a campus visit, which was used by 87.6% of the respondents. The remaining information sources with a mean rating of greater than 3 were: personal conversation with a professor (mean rating: 3.43, SD: 1.50, used by 71.7% of respondents), degree program information on a Web site (mean rating: 3.36, SD: 1.41, used by 77.3% of respondents), printed OSU publications (mean rating: 3.23, SD: 1.39, used by 72.3% of respondents), printed CASNR publications (mean rating: 3.15, SD: 1.50, used by 71.0% of respondents), and OSU Web site information (mean rating: 3.07, SD: 1.41, used by 71.7% of respondents).

Participants were then asked to use a scale of 1 (“not influential”) to 5 (“very influential”) to rank the effect that various institutional and degree program characteristics as well as individuals had on their college choice (Herren et al., 2011). The most influential institutional characteristic reported by participants (mean rating: 4.03) was opportunities after graduation. Also reported as influential were academic reputation, quality of facilities, campus environment, and scholarships awarded, though Herren et al. (2011) did not report the mean ratings for these institutional characteristics. The degree program characteristics reported as most influential were career opportunities after graduation (mean rating: 4.18), quality of facilities (mean rating: 3.84), reputation of courses (mean rating: 3.76), and faculty (mean rating: 3.71). The people who respondents reported as being the most influential on their college choice process were: parent or guardian (mean rating: 3.41, SD: 1.24, used by 87.6% of respondents), OSU graduate

(mean rating: 2.94, SD: 1.50, used by 71.7% of respondents), relative who attended OSU (mean rating: 2.74, SD: 1.41, used by 77.3% of respondents), high school agriculture teacher (mean rating: 2.63, SD: 1.39, used by 72.7% of respondents), and friend in college (mean rating: 2.61, SD: 1.50, used by 71.0% of respondents).

The study shows that a variety of institutional characteristics can influence college choice and that institutional marketing can play a role in college decisions as can key influencers such as parents, peers, teachers, and college alumni (Herren et al., 2011). This last finding—the role of key influencers in college choice—is consistent with the findings of Engberg & Wolniak, 2009; Muhammad 2008; and O'Connor et al., 2010, who all found that students' college choices can be affected by others. A limitation of the study by Herren et al. (2011) is that it focused only on students attending a single institution, so the results are not generalizable. The researchers also did not examine whether various institutional factors differentially influenced the college choice processes of students based on their gender or racial/ethnic group membership.

A similar study also looked at the influence of institutional characteristics as well as the sufficiency of information that students received. Dolinsky (2010) conducted a survey of a random sample of 187 undergraduate students from a mid-Atlantic university. Approximately 75% of the respondents were juniors. The remaining 25% were a near-even split of sophomores and seniors. The gender distribution of study participants was nearly equal between males and females (Dolinsky, 2010).

Respondents used a seven-point Likert scale (1 = not at all sufficient; 7 = very sufficient) to rate the adequacy of the information they had received regarding a variety of institutional attributes related to academics and career, finances, and college life

(Dolinsky, 2010). Respondents also used a similar scale (1 = not at all important; 7 = very important) to rate the value of each attribute for them. Like Herren et al. (2011), Dolinsky (2010) did not examine whether various institutional factors differentially influenced the college choice processes of students based on their racial/ethnic group membership. Dolinsky did, however, look at gender-based differences. Both male (mean rating: 4.86) and female (mean rating: 4.97) respondents rated the overall information they received from the university during their college search process as sufficient. In considering the sufficiency of information they had received regarding specific college-related attributes, female respondents gave the highest ratings for the following: location (mean rating: 5.80), attractiveness of campus (5.55), size of college (5.44), programs of study (5.38), and tuition (5.30). Male respondents gave the highest ratings for: location (5.59), tuition (5.42), attractiveness of campus (5.19), programs of study (5.17), and academic reputation (5.16). In considering the importance to them of the information they had received regarding specific college-related attributes, female respondents gave the highest ratings for: programs of study (5.84), location (5.82), scholarships (5.81), tuition (5.75), and academic reputation (5.74). Male respondents gave the highest ratings for: academic reputation (5.67), programs of study (5.65), tuition (5.62), scholarships (5.57), and quality of professors (5.31).

The differences between the sufficiency and importance ratings were then calculated and plotted on a grid to determine appropriate communications strategies for the university (Dolinsky, 2010). Attributes that were rated as important, but for which students had indicated an insufficiency of information fell into the “need to modify communications” quadrant of the grid. Those that were rated as important, and for which

students had indicated a sufficiency of information fell into the “continue current communications” quadrant. Those attributes that were rated as not important, and for which students had indicated a sufficiency of information fell into the “shift some communications resources elsewhere” quadrant. Those that were rated as not important, and for which students had indicated an insufficiency of information fell into the “limited attention” quadrant (Dolinsky, 2010).

The study demonstrated a need for the university to enhance communications to both male and female prospective students regarding job placement after graduation, financial aid, and scholarships (Dolinsky, 2010). The study also found a need to enhance communications with male prospects regarding quality of professors, and for female prospects regarding campus safety and friendly atmosphere. Both Dolinsky’s (2010) study and that of Herren et al. (2011) demonstrate that students evaluate a variety of institutional characteristics in making their college selection. Both studies also show that various marketing tactics and individuals can influence students’ enrollment decisions. It is important to note, however, that a limitation of Dolinsky’s study and that of Herren et al. is that both were conducted at single universities, which, therefore, limits their generalizability. The findings of both studies, however, support the need for the present study, which helps illuminate the various institutional characteristics that are among the factors that influence deaf and hard-of-hearing students’ college choice process.

A couple of recent studies have examined how institutional characteristics influence the college choice processes of students attending a broader range of institutions. These studies, however, have focused on a specific population of students—athletes. In one study, Johnson, Jubenville, and Goss (2009) surveyed 247 freshmen

student athletes at eight small, private higher education institutions across the Southeast who compete in the NAIA-member athletic conference. The gender distribution of respondents was 47.4% male and 52.6% female. The Student-Athlete College Choice Profile (Gabert, Hale, & Montalvo, 1999) was used to identify factors that were important in the college choice processes of respondents (Johnson et al., 2009).

The student athletes were asked to use a scale of 1 (“not important”) to 5 (“very important”) to rate the influence of 23 factors in their college selection (Johnson et al., 2009). The top two factors identified by respondents were opportunity to play (mean rating: 4.25, SD: 0.88) and head coach relationship (mean rating: 4.25, SD: 0.92). Additional factors in the top quartile were: degree programs offered (mean rating: 4.04, SD: 1.04), athletic facilities (mean rating: 3.86, SD: 1.08), school community (mean rating: 3.74, SD: 0.93), and academic support services (mean rating: 3.74, SD: 1.03). While some of the institutional characteristics (e.g., degree programs available, campus community/environment) that Johnson et al. (2009) found to be influential in college choice are similar to those found in the studies by Dolinsky (2010) and Herren et al. (2011), the findings of Johnson et al. (2009) provide insight into some of the unique institutional characteristics that influence student athletes’ college choices. The study has limitations, however, including the small sample size and the fact that it was drawn from a limited number of small, private institutions. An additional limitation is the fact that the researchers did not examine whether various institutional factors differentially influenced the college choice processes of students based on their gender or racial/ethnic group membership.

Another researcher conducted a similar study with student athletes, but focused only on one sport. Pauline (2010) surveyed 792 students who were members of NCAA lacrosse teams at postsecondary institutions in the Northeast and Mid-Atlantic regions of the United States. The gender distribution of respondents was 45.3% male and 54.7% female. The racial distribution was 94.2% Caucasian, 1.8% African American, 1.5% Hispanic, and 1.3% Asian or other. Freshmen comprised 32.6% of the respondents, sophomores 31.1%, juniors 20.4%, and seniors 15.9%. A total of 36.9% of the students in the sample attended NCAA Division I schools, 30.6% attended Division II schools, and 32.6% attended Division III schools. The researcher used a revised version of the Influential Factors Survey for Student Athletes (IFSSA), which originally was developed by J. S. Pauline, Pauline, and Stevens (2004) to determine the college choice factors influencing collegiate baseball players (Pauline, 2010).

The IFSSA-Revised asked respondents to use a scale of 1 (“not important”) to 5 (“extremely important”) to rate 53 factors in their college choice (Pauline, 2010). These factors were grouped into five categories: athletic, academic, social atmosphere, coaching staff, and financial aid. The top 10 factors identified by respondents were career opportunities after graduation (mean rating: 3.99, SD: 1.02), academic reputation of the college/university (mean rating: 3.99, SD: 0.91), overall reputation of the college/university (mean rating: 3.96, SD: .877), school offers your specific major of interest (mean rating: 3.84, SD: 1.01), reputation of academic program/major (mean rating: 3.81, SD: 1.00), social environment at university (mean rating: 3.78, SD: 0.89), social atmosphere of the team (mean rating: 3.76, SD: 0.96), campus (mean rating: 3.74, SD: 0.83), head coach’s personality/style (mean rating: 3.69, SD: 1.03), and academic

facilities (i.e., library, computer labs, classrooms; mean rating: 3.63, SD: 0.99). Of the five major categories, academic factors (overall mean rating: 3.52, SD: 0.70) were rated as the most important in the respondents' college choice, followed by: coaching staff (overall mean rating: 3.01, SD: 0.78), social atmosphere (overall mean rating: 2.99, SD: 0.53), financial aid (overall mean rating: 2.86, SD: 0.66), and athletic (overall mean rating: 2.79, SD: 0.65).

Studies such as those conducted by Pauline (2010) and Johnson et al. (2009) demonstrate that while institutional characteristics such as available programs of study, academic reputation, and campus environment influence the college decisions of a range of students, certain groups of students, such as student athletes, may be influenced by institutional characteristics that are unique to their group. A limitation of Pauline's study, however, is that he focused on only one sport. An additional limitation is the fact that, like Johnson et al. (2009), Pauline did not examine whether various institutional factors differentially influenced the college choice process of students based on their gender or racial/ethnic group membership.

One recent study looked at the college choice process of another unique group. Burleson (2010) conducted an online survey of 119 gay, lesbian, bisexual, transgender, and queer (GLBTQ) high school, college undergraduate, and graduate students to determine if the gay-friendliness of a college campus was a factor in their college decision-making. Respondents—six high school students, 95 undergraduates, and 18 graduate students—were asked to use a five-point scale to rate the importance of nine institutional factors in their college selection (Burleson, 2010).

The top factor influencing the students' college choices, with a mean rating of 3.73, was the quality of the education at the institution, followed by the institution's reputation, with a 3.29 mean rating, and student organizations, with a 2.64 mean rating. Gay-friendly campus and diversity both received a mean rating of 2.63, followed by academic support (2.52), financial aid (2.33), housing (2.16), and athletics program (.85). Although Burleson (2010) provided very little statistical detail of his findings, he did report that 67% of respondents indicated that attending a gay-friendly college was fairly or very important to them. Burleson concluded that, while academic quality and institutional reputation are top considerations, campus climate is a factor in GLBTQ students' college choice process. Similar to the findings of Pauline (2010) and Johnson et al. (2009), Burleson's findings demonstrate that, while some institutional characteristics, such as academic quality, reputation, and campus environment, influence the college decisions of a range of students, certain groups of students may be influenced by institutional characteristics that are unique to their group.

The studies reviewed in this section have primarily taken a psychological approach in examining college choice. They have focused on factors related to how college environments can affect student enrollment decisions (Paulsen, 1990). These studies demonstrate that a variety of institutional characteristics, including those related to academics, campus environment, tuition and financial aid, and outcomes/career opportunities, all can play a role in students' college choices. The studies included in this section also show that certain groups of students may be influenced by institutional characteristics that are unique to their group. This supports the need for the present study,

which explored the factors influencing deaf and hard-of-hearing students' college choices to help illuminate factors that are unique to that population.

### **Policy Influences on College Choice**

The studies reviewed thus far have demonstrated that student, family, and institutional characteristics all can influence college choice. Another area of research has examined how federal, state, and institutional policies can influence college choice. Much of this research focuses on how policy affects access to postsecondary education for students of color and lower SES who traditionally have been underrepresented in higher education (Bergerson, 2009).

One study looked at the role of policies in all 50 states to determine how they influenced college choice. Perna and Titus (2004) argue that four types of state policies can influence the type of institution that students attend. The first is direct appropriations that states make to postsecondary institutions. Perna and Titus note that state governments are the largest source of revenue for public postsecondary institutions, while state appropriations for private institutions vary. The second type of state policies that influence college choice are those related to financial aid for students. Although federal student financial aid is consistent across states, aid provided to students by states varies. The third type of state policies that influence college choice are those related to tuition. While not all states have state entities that dictate tuition rates, tuition at public institutions typically is determined in part by state appropriations and financial aid policies. Perna and Titus argue that state policies that affect academic preparation at the elementary and secondary school level are the fourth type of policies that influence college choice. This contention is supported by studies such as those conducted by

Engberg and Wolniak (2009, 2010); Joshi et al. (2009); Stearns et al. (2010); and Mattern and Wyatt (2009), which all found that academic preparation and ability is a factor in college choice.

To determine the relationship between the four types of state public policies and the type of postsecondary institution that students attend, the study employed multilevel modeling (Perna & Titus, 2004). The study included a sample of 10,148 high school graduates from all 50 states drawn from the National Longitudinal Study (NELS: 92/94). Perna and Titus (2004) gathered state information from the National Center for Educational Statistics, the National Association of State Scholarships & Grant Programs, and the Current Population Survey.

A multilevel multinomial analysis of the combined data demonstrated that all four types of state public policies influenced students' college choices (Perna & Titus, 2004). Results showed that as state appropriations to postsecondary institutions increased, the average likelihood of students enrolling in out-of-state institutions decreased. The study also found that as the gap between tuition at private four-year and two-year public institutions widened, the likelihood of enrolling in an in-state four-year public institution increased. Another finding was that as the amount of state need-based financial aid increased relative to the college-age population in the state, the likelihood of students enrolling at in-state private and public four-year institutions increased. With regard to the influence of K-12 policies on college choice, the results showed that as the ratio of students to teachers in a state's elementary and secondary schools increased, the likelihood of students enrolling at either an in-state public four year-institution or an out-of-state institution decreased (Perna & Titus, 2004).

The study also showed that postsecondary participation patterns were stratified by SES (Perna & Titus, 2004). Even after controlling for student-level variables and state contextual variables, the study found that low-SES high school graduates were less likely than other students to enroll in any type of college or university the fall after graduating from high school. For those students who did enroll, those with low SES were more likely, and those with high SES were less likely, than those with middle SES to enroll in an in-state public two-year institution than an in-state four-year or out-of-state institution (Perna & Titus, 2004).

Another study also found that public policy influences students' access to higher education and college choice. Lillis (2008) argues that federal, state, and postsecondary institutional policies have increasingly shifted the burden of paying for college to students, and that as a result, there has been an increase in the reliance on private loans to pay tuition. Lillis contends that the shift in financial aid policies, slow growth in family incomes, and rapid increase in college tuition rates has resulted in low-income students being forced to take out loans, attend less expensive colleges, or forgo college participation entirely.

The study surveyed 447 undergraduate students, 249 of whom were male, and 198 female (Lillis, 2008). The majority of participants (88%) were Caucasian, while 6% were African American, 2% Latino, 2% Asian, and 2% Native American. The study participants included 176 freshman, 141 sophomores, 82 juniors, 43 seniors, and 5 students who did not indicate a class rank. Participants were asked to select the category that best represented their financial status, which resulted in 16 students identifying themselves as wealthy, 123 as upper middle class, 264 as middle class, 35 as lower

middle class, and 9 as lower class. Lillis then combined these into two income classifications: high income, which comprised those who had identified as wealthy or upper middle class, and low/middle income, which comprised the participants who had identified as being in one of the remaining categories. The participants also were divided into two groups based on the type of college they attended: high-cost institution (annual tuition, room, and board in excess of \$35,000) or low-cost institution (annual tuition, room, and board less than \$20,000).

Students were surveyed on the factors that had influenced their college choice; the top three colleges they had considered and their reasons for considering them; tuition, room, and board; scholarships; and financial aid (Lillis, 2008). The results of the study showed that lower-income students were less likely to apply to more expensive colleges. The study also found that study participants attending high-cost institutions were more likely to be influenced by financial aid and scholarships when choosing a college than those attending low-cost institutions. Lillis (2008) argues that existing policies and practices have led to a high-tuition, high-loan environment that has exacerbated class-based stratification in higher education, and that federal, state, and institutional policy makers should develop strategies for increasing need-based aid.

A limitation of the study is the sampling method that was employed. The survey was part of the requirements for two undergraduate courses, each at one of two independent small private colleges (Lillis, 2008). The 57 students in those courses were asked to distribute and collect the surveys, and no restrictions were established regarding from whom or where the students drew their sample. The population from which the

study participants were drawn was not described by Lillis, but the sample was not randomly selected, which limits the generalizability of the results.

The influence of financial aid policies on college choice was the focus of another recent study. Kim, DesJardins, and McCall (2009) conducted simulations on data collected from students who sent their ACT scores to the University of Iowa for admission consideration for academic years 1997-1998 through 2001-2002 to determine how expectations for different types of financial aid (grants, loans, work study, and outside aid) would affect the students' college choices, particularly the choices of students with varying racial and economic backgrounds. The study dataset included 86,133 students—53% female and 47% male. The racial distribution of the sample was 88.8% White, 2.84% Black, 2.66% Asian, 1.72% Hispanic, and 3.9% other ethnicities. The household (parental) income distribution of the sample was 40.37% with income less than \$50,000, 42.62% with income in the \$50,000-\$99,999 range, and 17.01% with income of more than \$100,000 (Kim et al., 2009).

The researchers developed statistical models to estimate the probability of application, acceptance, and enrollment of the students to the university (Kim et al., 2009). Models also were developed to estimate the probability that students would receive four types of financial aid (grants, loans, work study, and outside aid) as well as to estimate the amount of each type of aid. Simulations were then conducted to determine the effect that increases or decreases in aid would have on the students' college choices. Results showed that students in the highest income group (more than \$100,000) were more likely to apply to the institution while those in the lowest income group (less than \$18,000) were least likely to apply to the institution, regardless of race and the expected

amount of aid. The study also found that African American and Hispanic students were less likely to enroll than White or Asian students, regardless of the simulated level of financial aid. When simulating zero financial aid, the probability for application among low and middle (\$42,000-\$50,000) income groups of all races was close to zero (Kim et al., 2009).

While the study population was limited, the results demonstrate that students from different racial and economic backgrounds respond differently to various financial aid packages (Kim et al., 2009). The results also demonstrate that students' expectations of financial aid influence their college choices. The results suggest the need to tailor financial aid policies to meet the expectations of underrepresented minority populations (Kim et al., 2009).

A mixed methods study in the recent literature also revealed policy influences on college choice. Pérez (2010) conducted a study to learn more about undocumented Latino students' college choice process. The study involved in-depth, one-on-one interviews and a quantitative questionnaire that was developed to gather demographic data. There were 14 study participants—seven men and seven women—all of whom were undocumented Latino college students. Half of the participants were students at a community college in California, and the other half attended a four-year public university in California. All of the participants were first-generation college students from low-SES families. The students were recruited through a snowball sampling method at schools selected for their location and reputation as being “AB 540 friendly” (i.e., supportive of California Assembly Bill 540, which provides opportunities for undocumented as well as

documented students to pay in-state college tuition costs if they attend and graduate from a California high school).

Transcripts from the interviews were coded for themes, analysis of which led to identification of three major factors influencing participants' college choice processes: social networks, creating opportunities through outreach, and cost/affordability (Pérez, 2010). Study participants relied on information from family, friends, and high school teachers and counselors in exploring college choices. They reported that they had to pursue information and take advantage of opportunities presented to them as well as creating opportunities for themselves by reaching out to people who could assist them. They also reported that, because their undocumented status made them ineligible for financial aid and unable to obtain driver's licenses, they primarily considered cost and distance from work and home in making their college decisions. The findings reported by Pérez demonstrate how federal, state, and institutional policies can influence students who are undocumented and from low-SES families.

The studies reviewed in this section have taken a primarily economic approach in examining college choice. These studies have focused on college selection as an investment-decision process (Paulsen, 1990). The economic approach to the study of college choice posits that students make college decisions by conducting cost-benefit analyses and select the alternative with the greatest net benefit (Perna and Titus, 2004). Thus, public policies regarding such things as tuition and financial aid can influence students' college decisions.

As seen in many of the studies included in this review, equity in access to postsecondary education is a major theme. As already noted and demonstrated by the

studies reviewed thus far, a major trend in the college choice field over the past 30 years has been examination of the experiences of groups of students with diverse backgrounds (Bergerson, 2009). This body of research enhances the overall knowledge on college choice and helps illuminate the college choice processes of students who are from minority populations. The studies included here demonstrate the importance of examining the factors that influence the college choices of students from various populations to better understand the similarities and differences between and among groups. They also provide points of comparison for the few studies that have been conducted on college choice among deaf and hard-of-hearing students.

### **College Choice Process of Deaf and Hard-of-Hearing Students**

The literature on deaf and hard-of-hearing students' college choice process is not current and is limited primarily to dissertations and master's theses, but it provides some context to help inform the present study. Goldstein (2001) looked at the factors that influence deaf and hard-of-hearing students' college choices with the goal of gathering data to inform practices for increasing students' participation and persistence in higher education. A total of 205 deaf and hard-of-hearing students attending public colleges across the United States were surveyed for the study. The majority of respondents (60%) were female, while 40% were male. Respondents ranged in age from 18 to 60 with a mean age of 26. The majority of respondents (69%) were Caucasian, while 10% were Asian, 9% Latino, 5% African-American, and 6% self-identified as "other." Sixty-six percent (66%) of respondents indicated that they had attended mainstream high schools, while 14% indicated that they had been "partially mainstreamed" (i.e., attended some classes with hearing students and some classes with only deaf students). Thirteen percent

(13%) of respondents had attended residential schools for the deaf, while 7% had been educated in self-contained classrooms (i.e., classes with only deaf students that are situated within a mainstream high school). Of the students who attended mainstream schools, 64% reported that English was their primary language, while 30% reported that their primary language was American Sign Language (ASL), 1% Spanish, and 5% “other.” The primary language of students who attended self-contained classrooms was 58% ASL, 40% English, and 2% other. For students who attended schools for the deaf, primary languages were 67% ASL, 30% English, and 3% other (Goldstein, 2001).

The study found that 44% of respondents attended a college less than 100 miles from their home, 22% attended a college that was 100-500 miles from their home, and 31% attended a college that was more than 500 miles from their home (Goldstein, 2001). When asked to identify the source that provided the most information to them about college, 19% of respondents indicated their parents, while 18% indicated school counselors, 12% teachers, 12% colleges and universities themselves, 8% deaf peers, and 7% Vocational Rehabilitation counselors (i.e., state employees who assist individuals with disabilities in transitioning from high school to work or postsecondary education). When asked about the types of information that they found most helpful when considering colleges, 24% reported that information about special services for deaf and disabled students was the most helpful, while 22% indicated that information about deaf-serving institutions (DSIs) was most helpful, 22% indicated information about academic programs, 17% career opportunities, and 6% rated information about admissions requirements as most helpful (Goldstein, 2001).

Using a scale of 0 (“not important”) to 3 (“very important”), study participants were asked to rate various institutional attributes (Goldstein, 2001). Academic and career opportunities received a mean rating of 2.4, services for deaf and hard-of-hearing students received a mean rating of 1.9, campus activities received a mean rating of 1.5, and proximity to home received a mean rating of 1.0. Respondents were then asked to use a scale of 0 (“not much”) to 3 (“very much”) to report how much they considered various factors in making their college choice. Quality of programs and services received a mean rating of 2.2, cost and financial aid received a mean rating of 2.0, and proximity to home received a mean rating of 1.5 (Goldstein, 2001).

These findings demonstrate that many of the institutional characteristics that influence deaf and hard-of-hearing students’ college choices are similar to those found in other studies to be influential in the college decision-making processes of the hearing student population. Things like cost and financial aid, as found by Dolinsky (2010), Gildersleeve (2010), Herren et al. (2011), Kim et al. (2009), Mattern and Wyatt (2009), and O’Connor et al. (2010); majors and programs, as found by Dolinsky (2010), Johnson et al. (2009), and Pauline (2010); and career/post-graduation opportunities, as found by Herren et al. (2011) and Pauline (2010), all influence deaf and hard-of-hearing students, as found in Goldstein’s study. However, Goldstein also found that the quality and availability of services for deaf and hard-of-hearing students influenced those students’ college choices. This demonstrates that, much like Johnson et al. (2009) and Pauline (2010), who found that unique factors influence the college choices of special populations such as student athletes, there are unique factors that influence deaf and hard-of-hearing students’ college choices as well.

Another study also looked at the factors influencing deaf and hard-of-hearing students' college choices. Call (1992) surveyed 92 deaf students enrolled in three mainstream postsecondary institutions in California that had large populations of deaf students. Fifty-five percent (55%) of the study participants were male, and 45% were female. The majority of participants (54%) were White, while 17% were Latino, 12% were Asian, 9% were Black, and 8% self-identified as "other." The majority of participants (65%) had attended public high schools, while 33% had attended residential schools for the deaf, and 2% had attended both public and residential schools. The preferred communication method for the majority of respondents (87%) was sign language (Call, 1992).

The study found that family members and others were influential in students' decision to attend college (Call, 1992). This is consistent with the findings of Goldstein (2001), Muhammad (2008), and Herren et al. (2011). A total of 40% of the respondents in Call's (1992) study indicated that a family member had been the most influential in their decision. Other top influencers included teachers (15%), friends and classmates (15%), a deaf adult (10%), and school counselors (8%). Ten percent (10%) of students reported that someone other than those listed had been the top influencer in their decision, and 2% of students did not provide a response to the question. Twenty-nine percent (29%) of study participants reported first learning about deaf-serving institutions (DSIs) before high school, while 21% reported not learning about DSIs until after they had graduated from high school. In total, 57% reported that they had not considered attending a DSI. Among those who had attended a residential school for the deaf, however, 57% indicated that they had considered a DSI, while only 35% of those who

had attended a mainstream high school had considered a DSI. The majority of the respondents to the survey reported that they had selected their college because they wanted the opportunity to associate with both deaf and hearing students (Call, 1992).

Another study employed a qualitative methodology to examine the experiences of deaf and hard-of-hearing students in mainstream colleges without special programs for, or sizable populations of, deaf and hard-of-hearing students. Smith (2004) interviewed 14 deaf students who were attending one of four mainstream public or private postsecondary institutions in the Pacific Northwest that enrolled a small number of deaf students. Study participants ranged in age from 18 to 23, with an average age of 21. The majority of participants ( $n = 9$ ) were women. Four of the study participants were from diverse backgrounds, including African American, Asian American, East Indian American, and Hispanic. Thirteen of the study participants indicated that they preferred to communicate in sign language, while one student preferred to communicate using spoken English and speech reading. All of the students had attended mainstream high schools; however, one had transferred to a residential school for the deaf during her junior year in high school. Study participants' high school GPAs ranged from 2.6 to 3.93, and their average college GPA was 2.90. Four of the students were college freshmen, six were juniors, and three were seniors (Smith, 2004).

Study participants reported considering attending a DSI or a mainstream institution with a special program for deaf students because they wanted the experience of being a member of a larger deaf population than they had been part of in their mainstream high schools (Smith, 2004). Only two students pursued those options immediately following high school, and within two years, both had transferred to

mainstream institutions. The rest of the students all chose to attend mainstream programs closer to home immediately after high school (Smith, 2004).

Study participants reported a number of factors that influenced their college choice (Smith, 2004). Half of the students indicated that they had selected their college based on the academic program they wanted to pursue. This finding is consistent with the findings of Dolinsky (2010), Goldstein (2001), Johnson et al. (2009), and Pauline (2010) that availability of desired academic programs influences college choice. Half of the students in Smith's (2004) study also reported that, as also found by Goldstein, the availability of good support services influenced their decisions. Consistent with the findings of Burleson (2010), Dolinsky, and Pauline, five students in Smith's study reported that their college's reputation was an important factor in their decision to attend. In addition, students reported that the location, as also found by Dolinsky, and physical environment of their college influenced their decision. Four of the students in Smith's study reported that attending a college where there were other deaf students was an important factor in their decision. This is consistent with Call's (1992) finding. Students in Smith's study also reported a desire to be challenged academically (Smith, 2004).

Another study also focused on deaf and hard-of-hearing students in mainstream colleges without special programs for, or sizable populations of, deaf and hard-of-hearing students. Menchel (1995) conducted interviews with 33 deaf students enrolled in 18 postsecondary institutions in New England to learn about the students' reasons for enrolling in a mainstream institution as well as their satisfaction with their decision and with their academic and social experiences at their institution. One of the study participants was Hispanic, the rest were Caucasian. The majority (n = 23) were female.

The students ranged in age from 19 to 30, with a median age of 22. All but one of the 33 students reported that they used speech and speech reading as their primary communication throughout elementary and secondary school. A total of 29 students indicated that they knew no sign language prior to entering college, while four reported using some signing prior to entering college. Ten of the students began learning and/or using sign language after starting college. The majority of the students ( $n = 28$ ) attended mainstream elementary and secondary schools, while three had attended a school for the deaf that emphasized oral or spoken communication rather than sign language for their elementary education and then a mainstream high school. Only one student in the study had attended a residential school for the deaf where sign language was used both in and out of the classroom for both elementary and secondary school, and one attended a special program for deaf children in a mainstream elementary school with a sign language interpreter. Most of the students came from well-educated families with above-average incomes and had high SAT scores and high school GPAs (Menchel, 1995).

The reasons students who participated in the study chose a mainstream college was that they felt comfortable in a “hearing” college environment (Menchel, 1995). They also believed that a mainstream college would be more challenging than a DSI. In addition, study participants reported that earning a degree from a mainstream postsecondary institution was more prestigious and, therefore, more advantageous with respect to career success than would be a degree from a DSI (Menchel, 1995).

While many of the studies on deaf and hard-of-hearing students’ college choice process are not current, they provide some context to help inform the present study. The studies reviewed in this section demonstrate that many of the factors that influence deaf

and hard-of-hearing students' college choices, including cost and financial aid, availability of academic programs of interest, and career/post-graduation opportunities, are similar to those that influence their hearing peers, as demonstrated by the findings of the studies reviewed in earlier sections of this chapter (e.g., Dolinsky, 2010; Gildersleeve, 2010; Herren et al., 2011; Kim et al., 2009; Mattern and Wyatt, 2009; and O'Connor et al., 2010). The literature on college choice among deaf and hard-of-hearing students also reveals, however, that much like the findings of Johnson et al. (2009) and Pauline (2010) that unique factors influence the college choices of special populations such as student athletes, there are unique factors that influence deaf and hard-of-hearing students' college choices as well, including the availability and quality of support services. The studies reviewed in this section also suggest that in choosing a college, deaf and hard-of-hearing students are deciding whether a mainstream college, a DSI, or a college with a special program for deaf students will provide the best environment for them.

### **The Importance of Student-University Fit**

The studies of deaf and hard-of-hearing students that have been included in this review of the literature point to the importance of student-university fit, which leads to increased satisfaction with the selected institution and has a positive effect on college completion (Braxton, Vesper, & Hossler, 1995). Tinto (1975, 1986) postulates that students bring various personal characteristics, experiences, and backgrounds to college, each of which influences students' college performance, expectations, and commitment. These, in turn, affect students' integration into the academic and social systems at college. Thus, the extent to which there is alignment between the student and the selected school, ultimately influences persistence to graduation (Tinto, 1975, 1986).

Building on Tinto's work, Braxton et al. (1995) conducted a study to determine how the alignment between students' expectations for college and their actual experience at college influences their persistence. The researchers analyzed data on 263 first-time, full-time freshmen attending four-year colleges in Indiana. The sample was a subset of a population of 4,923 students who were part of a longitudinal study on college choice, which followed the students from their freshman year in high school through their freshman year of college.

Braxton et al. (1995) analyzed student characteristics (gender, ethnicity, parental SES, parental encouragement for college), student expectations for college (expectations for academic and intellectual development, expectations for collegiate atmosphere, and expectations for career development), and students' initial commitments (educational attainment goals, institutional commitment as measured by whether the college they were attending was their first, second, third, or fourth choice). The researchers also analyzed students' academic and social integration into their postsecondary institution (as measured by their relationships with faculty and students, perceived intellectual growth, and other positive experiences), their subsequent commitments (as measured by their intention to graduate from college and their belief that they had chosen the right school), and their intention to return to their college for their sophomore year. The results of the study showed that the greater the extent to which students' expectations were being met, the greater the degree of their academic and social integration, which in turn had a positive effect on students' subsequent levels of institutional commitment. High subsequent levels of institutional commitment, in turn, had a positive effect on students' intention to graduate from the college (Braxton et al., 1995).

The relationship between college choice and student satisfaction was the focus of a more recent study as well. Gilbreath, Kim, and Nichols (2011) surveyed 228 students at two commuter college campuses in Indiana to determine the relationship between student-university fit and student satisfaction and well-being. Of the 228 participants, 48% were women, and 52% were men. The majority (85%) were White. Participants represented a range of class years: 15% freshmen, 19% sophomores, 31% juniors, 31% seniors, and 4% graduate students (Gilbreath et al., 2011).

Study participants were asked to complete a variety of measures for the study, including a questionnaire designed to examine 18 factors related to fit (e.g., sport and recreational opportunities, a diverse student body, a scholarly/intellectual campus climate, a safe environment) (Gilbreath, et al., 2011). This instrument asked students to use a scale of 1 (“not at all”) to 7 (“very much”) to assess, first, how important each of the 18 factors was to them, and second, to what extent their university provided it. Students’ overall satisfaction with the university was measured based on their ratings, using the same seven-point scale, of three items (“all in all, the university I have is great,” “in general, I am satisfied with my university,” and “my university is very enjoyable”). Students’ psychological well-being was measured using a 10-item (e.g., “feeling positive, confident, and secure with yourself,” “able to relax and enjoy yourself without difficulty”) instrument developed by Nowack (1991), which assessed the degree to which respondents’ mental state was characteristically positive. The study found that as student-university fit increased, students’ satisfaction with the university and psychological well-being increased. Gilbreath et al. (2011) argue that student-university fit is an important consideration in college choice and that their results suggest that student-university fit is

predictive of students' satisfaction with their college choice and their psychological well-being.

The studies reviewed in this section demonstrate the significance of student-university fit, which affects student satisfaction and ultimately can affect college completion (Braxton, Vesper, & Hossler, 1995). Karp, Holmstrom, and Cray (1998) have noted that in searching for a college, students are looking for a good fit—a place where they will feel comfortable, where there are other students who are like them and who share their interests. Studies such as those by Call (1992), Menchel (1995), and Smith (2004) suggest that finding a good fit is a consideration for deaf and hard-of-hearing students in selecting a college. This points to the need for the present study, which explored how identity and sociocultural factors affected deaf and hard-of-hearing students' selection of a DSI.

### **Identity and Sociocultural Influences on College Choice and the Role of MSIs**

Identity, or who students perceive themselves to be, seems to play a role in college selection. Karp, Holmstrom, and Cray (1998) conducted a year-long, multistage qualitative study with college-bound high school seniors and their parents. The study followed the families through their college search activities, and 90 semi-structured interviews were conducted with 30 families throughout the students' senior year in high school to examine their college choice experiences. Four of the families were Asian, two were African American, one was Hispanic, and the remaining families were White. The families ranged from lower-middle to upper-level socioeconomic status (Karp et al., 1998).

In analyzing data from interviews with 23 of the high school seniors in the study who were planning to leave home to attend a residential college, the researchers found that the students expected that going to college would be an opportunity to discover who they really were (Karp et al., 1998). Students also expected that their experiences in college would allow them to refine, and in some cases or to some extent, change their identity. Karp et al. (1998) argue that while financial considerations, academic interests, and institutional characteristics all play a role in students' college choice, the aspect of the decision-making process that makes college selection a challenge is that students know that, in choosing a college, they are choosing the context in which their new identities as independent adults will be established. Karp et al. maintain that students "viscerally understand that the idea of self is a situated object, rooted in social and institutional ties" (p. 262). As a result, in searching for a college, students are searching for a place where someone with their identity characteristics and identity aspirations will be able to succeed. The researchers contend that this explains why the most consistent and universal pattern in their data revealed that students' primary concern in searching for and selecting a college was finding a place where they would fit in and feel comfortable (Karp et al., 1998).

Participants in the study reported trying to determine if the students already attending the colleges that the participants were considering were like the participants (Karp et al., 1998). Some of the participants, however, particularly the minority participants in the study, were strongly interested in attending a college with a diverse student body. One African American student in the study wanted either to attend a college that was sufficiently diverse to include a strong African American community or

an HBCU that would not only provide a sense of community, but also would offer the opportunity to be part of the majority community (Karp et al., 1998).

Although participants in the study were concerned with finding a college where they would fit in, they also wanted a college that would allow them to: a) shed portions of their identity that they did not feel fit them anymore, b) explore new aspects of their identity, and c) discover who they truly are (Karp et al., 1998). Students in the study reported wanting to make a fresh start, which the researchers argue demonstrated students' desires to take on new roles and new identities consistent with the person they desire to become. Karp et al. (1998) contend that "students carefully attempt to pick a college where they will fit in, thus indicating the importance of retaining and consolidating certain parts of their identities," while also believing that college will allow them to "discover, in a holistic sense, who they 'really' are" (p. 265).

Students' ethnic and/or cultural affiliation is an aspect of their identity that can influence their college choices (Freeman, 1999; Muhammad, 2006, 2008; Van Camp, Barden, Ren Sloan, & Clarke, 2009). Sociocultural identity influences may be particularly influential in students' consideration of and decision to attend a minority-serving institution (MSI). An MSI is an institution that enrolls a high proportion of students from a given minority population (O'Brien & Zudak, 1998; Staten, Staten, Hollis, & Turner Whittaker, 2009). MSIs, including, among others, HBCUs, HSIs, and TCUs, have played a significant and similar role in educating students from minority populations throughout history (Staten et al., 2009). In addition to serving the educational needs of minority students, MSIs also help address their social and cultural identity needs (Raines, 1998; Staten et al., 2009).

Although there is a large body of research related to MSIs, very little of it focuses on college choice (Gasman et al., 2010). Moreover, few researchers have examined reasons for college choice that are related to ethnicity or culture. Among the scant research in this area is a study by Van Camp et al. (2009) who surveyed 167 Black undergraduate students at a private research HBCU in the Mid-Atlantic region of the United States to explore race- and non-race-related reasons for the students' college choice. The study also sought to determine if the reasons for students' college choice were related to campus activities they engaged in subsequent to enrolling. Participants in the study ranged in age from 18 to 27 years old, with a median age of 18.8. The majority (76%) were female. First-year students comprised the largest group in the sample (70%), followed by second-year students (21%); the remaining 9% were third year or beyond (Van Camp et al., 2009).

Study participants were asked to use a scale of 1 ("not very much") to 10 ("very much") to rate how influential 17 race- and non-race-related factors were in their college choice (Van Camp et al., 2009). They also were asked to use a scale of 1 ("not at all likely") to 5 ("definitely") to identify how likely it was that, in the coming semester, they would engage in various academic behaviors (e.g., joining a club with an academic focus), social behaviors (e.g., attending a concert), and race-related behaviors (e.g., taking a class with a racial or racial identity focus). The results showed that students' desire to associate with other Black students and to have opportunities for racial self-development were factors in the students' college choice. The results also showed that race-related reasons for college choice were associated with an intention to engage in race-related behaviors in the coming semester. Van Camp et al. (2009) argue that their

results provide empirical evidence of race-related reasons for college choice and point toward “a fundamental role” (p. 465) for HBCUs in higher education.

Another study also found cultural/identity influences on college choice. Freeman (1999) conducted a qualitative study that involved 16 group interviews with a total of 70 African American students in five cities with large African American populations. Study participants included 31 male and 39 female high school students in grades 10-12. The goal was to determine if the type of high school the students attended influenced whether they were considering attending a PWI (primarily White institution) or an HBCU (Freeman, 1999).

The study found that students who attended predominately White private high schools were more likely, in addition to considering prestigious PWIs, to consider HBCUs than students from predominately Black high schools (Freeman, 1999). The study also found that students who attended predominately Black high schools were more likely to report that they were considering PWIs. In exploring the students’ reasons for the colleges they were considering, Freeman (1999) found that Black students attending predominately White private schools expressed a desire to find their roots and enhance their cultural awareness, while those attending predominately Black high schools expressed a desire to attend PWIs in order to broaden their range of experiences and have opportunities to learn about and interact with people from a wide range of cultures and backgrounds. These students felt that a PWI would offer them better preparation for a career in an increasingly diverse world. Some of them also indicated that they felt a responsibility to share their culture with students at PWIs. Freeman also found that, regardless of the type of high school students attended, knowing someone who attended

an HBCU influenced the likelihood that they would consider attending one as well. Freeman argues that understanding the cultural/identity influences on students' college choice processes can enhance students' enrollment in and completion of postsecondary education. Her argument aligns with the arguments made by other researchers (e.g., Braxton et al., 1995; Gilbreath et al., 2011; and Tinto, 1975, 1986) that academic and social integration increases student satisfaction and the likelihood that they will remain enrolled in college.

Cultural considerations are not paramount for all students, however. Palmer, Maramba, and Lee (2010) found that some African American students preferred PWIs over HBCUs because, like some students in Freeman's (1999) study, they felt mainstream institutions offered more diversity and better preparation for their future in the "real world." Palmer et al. (2010) conducted a qualitative study at a mid-sized, research PWI in a small town in the Northeastern United States. A total 13 African American students were interviewed—seven seniors and six juniors—all with GPAs above 2.5, and an average GPA of 3.0. Nine women and four men participated, ranging in age from 19 to 23. The researchers wanted to learn whether the students had considered attending an HBCU and why they chose not to (Palmer et al., 2010).

The study found that the majority of study participants had misperceptions and lacked knowledge about HBCUs (Palmer et al., 2010). The reasons study participants cited for not choosing an HBCU included practical factors such as being too far from home or costing too much. Many of the students who cited these reasons thought that HBCUs were only located in the Southern United States and that, as out-of-state students, the cost would have been higher than the cost to attend the in-state public school they had

chosen. Eight of the 13 students also said that they had chosen a PWI because they believed that PWIs were more rigorous than HBCUs and, therefore, would provide them with a competitive advantage. This is similar to Menchel's (1995) finding that some deaf and hard-of-hearing students chose mainstream institutions because they believed that graduating from those institutions would be more advantageous than graduating from a DSI. Ten of the 13 participants in the study by Palmer et al. (2010) indicated that they had not selected an HBCU because they believed that HBCUs lacked diversity and, therefore, would not prepare them well for the future. Contrary to the findings of Freeman (1999), Palmer et al. found that African American students who had attended primarily White high schools were not more likely to consider HBCUs. The students in their study who had attended such high schools instead said they did not consider HBCUs because they felt a PWI more closely aligned with their high school environment, and therefore, would be a better fit (Palmer et al., 2010).

Another qualitative study examined the role of HBCUs in African American students' college choice process. Like Freeman (1999) and Palmer et al. (2010), Tobolowsky, Outcalt, and McDonough (2005) found that some students were disinclined to choose an HBCU because of the perceived lack of diversity at those schools, while others were interested in HBCUs for the opportunity they provided to study with other African American students. Tobolowsky et al. conducted 78 focus groups and 50 individual interviews at 20 Los Angeles-area high schools as part of a larger study to examine the attitudes of African American high school students, parents, and counselors toward HBCUs.

Analyzing a subset of the data based on comments regarding HBCUs by 63 African American students, 29 parents, and 8 counselors, the researchers found that students were familiar with and interested in HBCUs (Tobolowsky et al, 2005). For some students, attending an HBCU was a lifelong goal. Similar to Freeman's (1999) findings, students in the study by Tobolowsky et al. (2005) who had a family member who attended an HBCU were especially likely to be interested in attending one themselves. Unlike the students in the study by Palmer et al. (2010), many of the participants in the study by Tobolowsky et al. commented on the quality, rigor, and prestige of HBCUs and their programs. A small number of participants, however, reported that they were considering an HBCU because they had heard that it was easier to get accepted to HBCUs than to other schools. Study participants also reported other perceived advantages of HBCUs—personalized attention and supportive academic and social environments. Study participants also reported being concerned about possible feelings of social isolation at mainstream universities due to the racial composition of the student body as compared to HBCUs, which offer the opportunity to be part of the majority population on campus. Similar to students in the study by Palmer et al. (2010), participants in the study by Tobolowsky et al. had misperceptions about HBCUs that caused them to express concerns about having to go out of state to attend an HBCU and pay higher tuition because of their out-of-state status.

Similar to HBCUs, cultural/identity factors also can play a role in students' selection of tribal colleges and universities (TCUs). Brown (2003) completed a qualitative study with students who had attended a TCU before transferring to the University of North Dakota (UND). Brown conducted interviews with 11 students who

all were enrolled members of federally recognized American Indian tribes in North Dakota. Participants ranged in age from 22 to 48. All had a GPA of 3.0 or higher and had transferred to UND after completing 45 credits or more at a TCU. All of the study participants indicated that their experiences at the TCU had been excellent and that they would recommend that other American Indian students begin their postsecondary education at a TCU before transferring to a mainstream institution. Similar to participants in the study by Tobolowsky et al. (2005), students in Brown's study cited supportive faculty and a cultural environment that empowered them and increased their self-confidence. Many of the students felt that they would not have succeeded in a mainstream institution without the foundation provided by the TCU they had attended (Brown, 2003).

Similar to other MSIs, DSIs play a unique role, serving not only deaf and hard-of-hearing students' educational needs, but their social and cultural identity needs as well (Foster & Elliott, 1986). Some deaf and hard-of-hearing students who choose a mainstream college do not have a positive experience. Noting that the impact of mainstreaming is felt both inside and outside the classroom, Foster and Elliott (1986) conducted a qualitative study of 20 deaf and hard-of-hearing students who transferred to a DSI after experiencing difficulties at mainstream institutions without special programs for deaf and hard-of-hearing students. The researchers used semi-structured interviews to learn more about the students' experiences at their previous college, their decision to transfer, and their experiences since arriving at the DSI. In addition to not being current, a significant weakness in Foster and Elliott's report of their study is that the researchers did

not provide demographic or background information on the study participants to help contextualize their findings.

Nonetheless, most of the study participants cited negative experiences with instructors, support services, the college environment, and the social life at their previous college as their reasons for transferring to the DSI (Foster & Elliott, 1986). The study participants indicated that many teachers at their previous college did not understand their unique needs as deaf and hard-of-hearing students. Many students also reported that the classes at their previous college were too fast-paced and often too large. Students also reported that their former colleges provided inadequate support services (e.g., lack of skilled sign language interpreters). Finally, they reported frequently feeling socially isolated and lonely at their previous colleges (Foster & Elliott, 1986).

Study participants cited a variety of reasons for transferring to the DSI, including the school's reputation and job placement record (Foster & Elliott, 1986). Some also cited a desire to escape social isolation and be in an environment where they were not part of a small minority as they had been at their former mainstream college. A few expressed a desire to explore their Deaf identity. Students reported that their experiences since transferring to the DSI had been positive. They felt that their teachers understood their needs and that the pace of courses was more manageable. They also reported improved opportunities for socializing with their peers. Foster and Elliott (1986) argue that their findings point to the importance of educational environments that understand and can appropriately serve the needs of deaf and hard-of-hearing students.

The results of at least one study, however, show that a DSI may not be the best fit for all deaf and hard-of-hearing students. Barnhart (1991) conducted a qualitative study

with 13 newly arrived freshman at a DSI to describe and explain their transition process. Barnhart hypothesized that the students' interactions with peers would influence their adjustment and subsequent decision to either remain at the DSI or leave prior to graduating. The study participants included seven males and six females. The majority (n = 9) were White, while two were Black, and two were Asian. Most (n = 7) had been deaf since birth, but three lost their hearing at or before age 5. The remaining three became deaf between the ages of 6 and 15. All of the study participants had attended mainstream schools while growing up, and all except one used only spoken communication at home. One student used both spoken and signed communication at home while growing up. Nine students had used only spoken communication at school, while four had used both spoken and sign communication (Barnhart, 1991).

Three interviews were conducted with each student—one interview during their second week on campus for a “new signers program” (i.e., a program for students who are new to sign language or whose existing sign language skills are limited), one interview three weeks following the first, and a final interview two weeks before the end of the fall semester of their freshman year (Barnhart, 1991). When asked their reasons for choosing the DSI, all but one indicated that their primary reason was the institution's emphasis on teaching deaf and hard-of-hearing students. In the first round of interviews, all students indicated that they felt awkward trying to learn sign language and learn about Deaf culture, but seven indicated that they were, nonetheless, enjoying the experience, while three said they felt frustrated. The majority (n = 9) indicated that they planned to remain at the DSI until they graduated, but four indicated that they were not yet sure if they would remain at the DSI. In the second round of interviews, 10 students indicated

that they were happy to be at the DSI and four reported feeling a sense of belonging, but one reported feeling left out, and four were not sure they were fitting in. By the third round of interviews, six students indicated that they planned to stay at the DSI until they graduated, but five indicated they were not sure if they would stay and were considering transferring to another college, while two indicated they were staying for the time being, but were unsure whether they would stay long enough to graduate (Barnhart, 1991). These results illustrate that not all deaf and hard-of-hearing students identify with Deaf culture or are comfortable at a DSI.

The studies included in this section demonstrate that identity and sociocultural factors can influence college choice. These factors can be particularly influential in students' consideration of and decisions to attend an MSI. This supports the need for the present study, which explored how identity and sociocultural factors affected deaf and hard-of-hearing students' selection of a DSI.

### **Summary**

A review of the literature uncovers a wealth of information on college choice and affirms the importance of this field of research. The studies included in this review provide examples of trends in the college choice field, including a movement away from the development and testing of broad models in favor of examination of the college choice processes of students with diverse backgrounds in order to better understand their experiences (Bergerson, 2009). This review of the literature has demonstrated the importance of studying the factors that influence the college choices of students from various populations to uncover the similarities and differences between and among groups. This supports the need for the present study, which explored the factors

influencing deaf and hard-of-hearing students' college choices to help illuminate the experiences of this unique population. The present study contributes to the knowledge in the college choice field and enhances understanding of deaf and hard-of-hearing students' college choice process. The sparse literature on deaf and hard-of-hearing students is not current and is limited primarily to dissertations and master's theses. Studies such as those conducted by Barnhart (1991), Call (1992), Foster and Elliott (1986), Goldstein (2001), Menchel (1995), and Smith (2004) do, however, provided some context that helped inform the present study. These studies help illuminate some of the factors that influence deaf and hard-of-hearing students' college choices. Some of them point toward cultural/identity influences on college choice that warrant further investigation. The sparse literature on identity and sociocultural influences on college choice and the role of MSIs (e.g., Barnhart, 1991; Brown, 2003; Foster & Elliott, 1986; Freeman, 1999; Karp et al., 1998; Tobolowsky et al., 2005; Van Camp et al., 2009) supports the theoretical framework for, and focus of the present study, the methodology for which is described in Chapter 3.

## Chapter 3: Methodology

### Introduction

Students with disabilities, including those who are deaf or hard of hearing, are participating in postsecondary education at increasing rates (Newman, Wagner, Cameto, Knokey, & Shaver, 2010). The benefits of postsecondary education for individuals who are deaf or hard of hearing include, among others, lower rates of unemployment and higher wages (Walter, 2010). Given the benefits of enrolling in and completing college, it is important to understand the process deaf and hard-of-hearing individuals use in deciding whether and where to attend college. Such an understanding could help guide student decision-making regarding postsecondary education, which is important because the college a student chooses could ultimately mean the difference between persisting and dropping out (Braxton, Vesper, & Hossler, 1995).

The present study enhances the body of knowledge in the college choice field by helping to illuminate the college choice process of a unique group—the deaf and hard-of-hearing population. The study investigated the factors that influence deaf and hard-of-hearing students' college choices, and explored whether deaf identity influenced students' selection of a deaf-serving institution (DSI)<sup>4</sup>. The study addressed these questions:

- How do deaf and hard-of-hearing students describe the factors that influenced

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<sup>4</sup> For the purposes of this study, a DSI refers to one of two postsecondary institutions founded by the U.S. Congress and funded by the federal government to serve deaf and hard-of-hearing students.

their college choice?

- In what ways does a deaf or hard-of-hearing student's deaf identity influence the selection of a DSI?

When little research has been done on a particular topic, a qualitative approach to studying it is most appropriate (Creswell, 2009). Qualitative approaches are useful for research, such as the present study, that is “exploratory or descriptive and that stresses the importance of context, setting, and participants’ frames of reference (Marshall & Rossman, 2006, p. 54). The research questions that guided this study lent themselves to a qualitative phenomenological research design, which provided an opportunity for in-depth exploration of the unique individual college choice experiences of the study participants (Creswell, 2007, 2009). This aligned with arguments made by Bergerson (2009) and Perna (2006) that there is a significant need for more qualitative research in the college choice field to examine the college-related decision processes of individuals from diverse backgrounds and capture the richness and complexity of their experiences. A discussion of the study context follows.

### **Study Setting**

The location for the study was a comprehensive private university, which is referred to in this study as The University. In fall 2011, The University, which is located in the Northeastern United States, enrolled more than 17,500 students (The University, n.d.b.). In the 2011-2012 academic year, The University had more than 3,700 faculty and staff members (The University, n.d.b.). A college for deaf students, which is referred to in this study as The College, is one of several colleges comprising The University. The College is one of two postsecondary institutions founded by the U.S. Congress and

funded by the federal government to serve deaf and hard-of-hearing students. The College offers associate degree programs for deaf and hard-of-hearing students and provides access and support services (e.g., sign language interpreting, captioning, and note taking) for deaf and hard-of-hearing students enrolled in bachelor's degree programs in the other colleges of The University (The College, 2011). In 2010-2011, The College provided more than 98,000 hours of interpreting services, 77,000 hours of note taking services, and approximately 21,000 hours of real-time captioning services (The College, 2011). The College also provided more than 2,300 hours of audiological training and 3,800 hours of speech-language training for deaf and hard-of-hearing students interested in enhancing their receptive communication skills and use of spoken English (The College, 2011).

As of fall 2011, there were 1,354 deaf and hard-of-hearing students from across the United States and 20 other countries enrolled at The University (The College, 2011). A total of 766 deaf and hard-of-hearing students were enrolled in associate degree programs within The College, while 515 were enrolled in bachelor's degree programs in the other colleges of The University (The College, 2011). There were 31 deaf and hard-of-hearing students enrolled in The College's master's degree program in deaf education, while 42 were enrolled in master's degree programs in the other colleges of The University (The College, 2011). In the 2010-2011 academic year, The College had nearly 590 faculty and staff, more than 110 of whom were deaf or hard of hearing (The College, 2011). Among the faculty and staff of The College are nearly 125 professional sign language interpreters and more than 50 individuals who provide real-time captioning

services (The College, 2011). Individuals who are deaf or hard of hearing comprise 31% of the faculty and 31% of the administration of The College (The College, 2011).

The University and The College offer a wide range of extracurricular activities, including more than 250 clubs and student organizations, some of which are exclusively for deaf and hard-of-hearing students (The University, n.d.a). The College also offers a certificate program and courses in Deaf<sup>5</sup> cultural studies, and a number of lecture series and other activities designed to provide students' opportunities to enhance their knowledge of Deaf history and culture (The College, n.d.). In addition, The College offers courses in ASL for deaf, hard-of-hearing, and hearing students (The College, n.d.).

The University, which was founded in 1829, offers more than 200 programs of study, including more than 90 programs at the baccalaureate level in areas that include business, engineering, art and design, science and mathematics, liberal arts, photography, computer science, and information technology (The University, 2012). The University places heavy emphasis on career education and experiential learning, and offers one of the oldest and largest cooperative education programs (co-op) in the world (The University, n.d.b.). In the 2010-2011 academic year, more than 3,500 students participated in The University's co-op program, alternating periods of on-campus study with periods of paid employment with companies and organizations across the United States and overseas (The University, 2012).

### **Study Participants**

Study participants were 15 deaf and hard-of-hearing students, age 18 or older. All were enrolled in their first year of study in bachelor's degree programs at The University.

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<sup>5</sup> The upper case Deaf is a label used to refer to those who have a social, political, and cultural affiliation with the Deaf community, while the lower case deaf refers to the audiological condition of hearing loss (Leigh, 2009).

Table 3.1 provides a summary of the study participants' demographic characteristics.

Table 3.1

*Study Participants*

Pseudonym	Sex	Age	Race	Deafness Onset	Self-Description	Communication Preference
Abby	Female	18	Asian	Birth	Deaf	Sign Language
Ava	Female	19	Caucasian	Birth	Deaf	Sign & Spoken
Avery	Female	18	African American	Birth	Hard of Hearing	Spoken Language
Ben	Male	18	Caucasian	1-2	Hard of Hearing	Spoken Language
Beth	Female	19	Caucasian	Birth	Deaf	Sign & Spoken
Dan	Male	19	Asian	Birth	Deaf	Sign & Spoken
Ella	Female	18	Caucasian	Birth	Hard of Hearing	Spoken Language
Grace	Female	18	Asian	3-5	Deaf	Sign & Spoken
Jacob	Male	18	Caucasian	Birth	Deaf	Sign Language
Jim	Male	18	Latino	Birth	Hard of Hearing	Spoken Language
Liam	Male	19	Latino	Birth	Hard of Hearing	Spoken Language
Lily	Female	19	Asian	1-2	Deaf	Sign & Spoken
Noah	Male	18	Caucasian	Birth	Deaf	Sign & Spoken
Olivia	Female	20	Caucasian	Birth	Hard of Hearing	Spoken Language
Sofia	Female	19	Caucasian	3-5	Deaf	Sign & Spoken

This study focused on students pursuing bachelor's degrees because those

students have academic backgrounds that qualify them for admission to a number of other postsecondary institutions. In other words, The University was not their only postsecondary option. For example, the middle 50% of students accepted into liberal arts programs at The University have SAT scores in the 1560-1860 range (The University, 2012). The average SAT score in the United States is 1500, which qualifies students to be accepted into a large number of colleges and universities around the country (The Princeton Review, n.d.). It was expected that selecting participants who had a wider range of postsecondary options and decided to attend The University would yield richer data than selecting participants whose lack of academic qualifications may have left them with few postsecondary options. Additionally, the study focused on first-year students because they had just recently experienced the college search and selection process, and therefore, were expected to be more likely to recall their experiences.

The theoretical framework for the present study was deaf identity development (DID) theory, which postulates that people who are deaf or hard of hearing have varying degrees of awareness of and identification with Deaf culture and the Deaf community (Glickman, 1993). One of the research questions guiding this study asked in what ways a deaf or hard-of-hearing student's deaf identity influences the selection of a DSI. Therefore, the researcher sought to recruit study participants with a range of deaf identities.

One of the markers of a strong Deaf cultural orientation is the use of American Sign Language (ASL) (Glickman, 1993). Reagan (1995) argues that, "the single most significant element of Deaf cultural identity is, without a doubt, competence in ASL" (p. 243). Therefore, the study included students who prefer to communicate using ASL, as

well as students who prefer to communicate using spoken English. Other goals were to include both male and female students as well as students with a range of racial and ethnic backgrounds. Additionally, the researcher sought participants who were enrolled in a variety of programs of study, and students from various geographic regions. The overarching goal for all study selection criteria was to have a diverse group of study participants, which added to the richness of the data collected and provided an opportunity to uncover similarities and differences in college choice experiences across a range of students (Glesne, 1999).

A total of 85 deaf and hard-of-hearing students were admitted to bachelor's degree programs as freshmen at The University in fall 2012 (The College, 2012). The researcher asked faculty members to distribute copies of a flyer (Appendix A) to deaf and hard-of-hearing baccalaureate students at The University and to post copies of the flyer in office areas, labs, and lounge/study areas frequented by deaf and hard-of-hearing baccalaureate students. Additionally, a member of the student government agreed to share copies of the flyer with deaf and hard-of-hearing students. The flyer invited students to participate in two individual interviews with the researcher about how they made their college choice. The flyer indicated that, as an incentive to participate, students would receive a \$20.00 gift card for The University bookstore for each interview. The flyer made clear that participation was voluntary, and that students who were interested in participating should contact the researcher by email. When students emailed the researcher to indicate their interest in participating, the researcher scheduled both the first and second interviews with each participant at mutually agreeable times.

## **Data Collection Methods**

Data for the study was gathered using five sources: initial individual interviews, background information forms, individual follow-up interviews, a document reflection activity, and the researcher's field notes. The researcher audio and video recorded the interviews for later transcription and analysis. To ensure the confidentiality of study participants, only the audio files were used for transcription. For participants who did not use spoken English for their interviews, the researcher requested the services of a professional sign language interpreter from The College's access services department, which assigns interpreters upon request. The interpreter viewed the video recordings and provided voiced English interpretation of all comments and responses made by students in sign language. These interpretations were audio recorded, which facilitated subsequent transcription. The video recordings were helpful in capturing the facial expressions and other nonverbal cues that are a critical component of sign language communication (Grossman & Kegl, 2007). They also provided a record of the interviews for later review by the researcher to enhance the researcher's field notes.

**Initial interviews.** When participants arrived for the initial interview, which took place in an office on The University campus, they were greeted, thanked for attending, and invited to be seated. The researcher then briefed the students on the purpose of the study, plans for maintaining confidentiality, and the general format for the interview. Next, the researcher asked each participant to complete three forms. The first was a consent form (Appendix B) that had been developed using the St. John Fisher College (SJFC) Institutional Review Board's (IRB) Informed Consent Form template. This form outlined the purpose of the study, any risks and benefits of participation, methods for

protecting confidentiality/participant privacy, and participants' rights. The second form was a debriefing form (Appendix C) that was developed using the SJFC IRB Debriefing Form template. This form provided information about the study as well as contact information for the researcher and study supervisor. This form also provided an opportunity for participants to request the results of the study, which were provided to them in abstract form upon completion of the study. The third form was a background information form (Appendix D) that was developed by the researcher to collect standard demographic and other background information from study participants.

To protect confidentiality, each participant was assigned a pseudonym. A pool of 20 male and 20 female pseudonyms was chosen by the researcher from a Social Security Administration website<sup>6</sup> that provides a ranked listing of the most popular baby names in the United States in a given year. To avoid any confusion, the researcher made sure that none of the pseudonyms that were used matched the real first names of any participants in the study. The researcher kept a master list of the study participants' names and the pseudonyms assigned to them.

Before the initial interview began, the researcher asked each participant about their preferred method of communication. For those participants who knew no sign language and preferred to communicate using spoken English, the researcher used spoken English to conduct the interview. For those participants who preferred to communicate using sign language alone or using what is known as simultaneous communication—spoken English and sign language together (Tevenal & Villanueva, 2009), the researcher conducted the interview using simultaneous communication.

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<sup>6</sup> <http://www.ssa.gov/cgi-bin/popularnames.cgi>

The initial interview protocol (Appendix E) included open-ended questions designed to encourage study participants to share information about their college choice experiences (Creswell, 2007, 2009). The questions prompted students to discuss the factors that were important to them in searching for a college and the factors that influenced their selection of The University. The initial interview protocol also included questions designed to gather information related to the concepts of student-university fit and deaf identity influences on college choice. The goal was to encourage participants to share their experiences in their own words in order to gather rich data for later analysis (Creswell, 2007).

At the conclusion of the initial interviews, participants were invited to share any final thoughts about their college search process and why they choose The University. They also were reminded about the date and time for their follow-up interview. The participants then were thanked for their participation and given their bookstore gift card incentive as they left. Immediately following each interview, the audio recordings were sent out for professional transcription.

**Background information forms.** Students who participated in the study were asked to complete a background information form, which provided a second source of data for the study (Appendix D). These forms collected standard demographic information as well as information on participants' deafness, elementary and secondary school type, communication preferences, and affiliation, if any, with the culturally Deaf community. The form also included a question to confirm students' willingness to participate in a follow-up interview.

**Individual follow-up interviews.** The individual follow-up interviews took place approximately one week following the initial interviews and were conducted in the same office on The University campus where the first interviews with the study participants had been conducted. When participants arrived at the follow-up interview, they were greeted, thanked for attending, and invited to be seated. The researcher then reminded each participant about the purpose of the study, plans for maintaining confidentiality, and the general format for the follow-up interview session.

The protocol for the semi-structured individual follow-up interviews included questions designed to further explore students' college choice experiences (Appendix F). Questions focused on the factors that influenced study participants to attend a deaf-serving institution and how social factors and friendships influenced their college choice. Additional questions were individualized follow-up questions to clarify or expand on information that participants had shared in their initial interview. At the conclusion of each follow-up interview, participants were invited to share any final thoughts regarding their college choice process and why they chose The University. Participants then were asked to complete the document reflection activity described in the next section. Immediately following each interview, the audio recordings were professionally transcribed.

**Document reflection activity.** For this activity, participants were given a copy of one of The University's recruitment brochures and asked to review it. They also were given a highlighter, a pen, and a pad of sticky notes and asked to use those tools to highlight text within the brochure that appealed to them during their college search process. The brochure was a 12-page, full-color brochure from The University's 2011-

2012 recruitment cycle. Thus, it was a copy of one of the same brochures that the study participants had received from The University when they were in high school and engaged in their college search and selection process. The goal with this activity was to gather additional data from participants on the factors that were important to them as they considered college options. When the participants had completed the activity, the researcher collected the brochure, thanked the participants for their participation, and gave them their bookstore gift card incentive.

**Field notes.** During the initial interviews and follow-up interviews, the researcher observed the participants and took field notes, which provided a descriptive record of what the researcher saw and heard (Creswell, 2007). The field notes also captured the researcher's thoughts and reactions. In addition, the researcher captured additional thoughts and observations in field notes written immediately upon conclusion of each interview session. Finally, additional observations were made in field notes written upon the researcher's review of the video recordings of the interview sessions. The field notes aided the researcher in developing individualized questions for the follow-up interviews with study participants and provided an additional source of data for the study.

### **Data Analysis**

Analysis of the study data involved reading all of the interview transcripts and employing a coding process to identify themes (Creswell, 2007; Hycner, 1985). The process began with the researcher reviewing the transcripts multiple times to get a general sense of the data and its overall meaning (Creswell, 2007, 2009; Hycner, 1985). The researcher then began the coding process, which involved reading the transcripts and segmenting phrases, sentences, and/or paragraphs into categories and labeling each

category with a code (Creswell, 2009; Miles & Huberman, 1994). This process was facilitated by the use of spreadsheets. The researcher keyed each category code and code definition into a separate spreadsheet and then copied and pasted all of the corresponding segments from the transcript into the appropriate spreadsheet.

Both a priori and inductive or open coding was used in analyzing the data (Creswell, 2007; Miles & Huberman, 1994; Ryan & Bernard, 2003). A priori coding involved reviewing the data to find segments that matched an existing list of codes developed by the researcher prior to data collection. These a priori codes emerged from the theoretical framework for the study, the college choice literature, and the research questions (Creswell, 2007; Miles & Huberman, 1994; Ryan & Bernard, 2003). The list of a priori codes was the beginning of a master code list that the researcher used throughout the coding process. This master code list included a descriptive title for each code, a definition, and the abbreviation that was used for each code (Miles & Huberman, 1994). Creating operational definitions for each code helped ensure that the researcher applied them consistently across data (Miles & Huberman, 1994).

Inductive or open coding of the data involved reviewing data to find segments that did not match the a priori codes, but rather, were unique, previously unidentified categories of information (Creswell, 2007; Miles & Huberman, 1994; Ryan & Bernard, 2003). As new codes were identified through this open coding process, the researcher added them to the master code list, creating a descriptive title, definition, and abbreviation for each. As the coding process continued, some of the codes were revised, eliminated, or subdivided (Miles & Huberman, 1994). Analysis continued with repeated

reading and coding of the transcripts, which allowed the researcher to identify new meanings in the data (Seidel, 1998).

The next step in the data analysis process involved reviewing the codes to look for similarities (Creswell, 2009). The researcher then clustered similar codes to create a small number of categories that distilled the study data into overarching themes (Creswell, 2009; Hycner, 1985; Miles & Huberman, 1994). The four themes that emerged describe the essence of the study participants' experiences in making their college selection (Creswell, 2007; Miles & Huberman, 1994). The researcher also reviewed and analyzed the demographic information forms and her field notes to determine themes that emerged from those sources.

The final step in the process involved analyzing data from the document reflection activity. To facilitate this process, the researcher created a spreadsheet that included a separate row for each of the study participants, listed by pseudonym. The researcher then created columns and labeled each with a heading that corresponded to topics found in the recruitment brochure used in the document reflection activity. The researcher then filled in the spreadsheet by making marks to indicate which topics in the brochure had been highlighted by each study participant. The researcher then organized the topics to correspond with the four themes that had emerged from analysis of the interview transcripts, demographic forms, and field notes.

### **Data Management**

Video and audio recordings for this study were made using high quality recording equipment. All video and audio digital files were stored on a password-protected computer and were backed up onto secure servers. Electronic copies of transcripts and

other files associated with the study were stored and backed up in the same manner. Paper copies of transcripts, field notes, and background information forms were stored in a locked cabinet in a locked office. To ensure participant confidentiality, a pseudonym was used for the location of the study and, as already noted, for each of the study participants. The pseudonyms were used in all electronic files and transcripts. The sign language interpreters who helped create audio files from the interviews with students who communicated using sign language maintain strict confidentiality as prescribed in the ethical tenets outlined in the Registry of Interpreters for the Deaf (RID)/National Association of the Deaf (NAD) Code of Professional Conduct.<sup>7</sup>

### **Study Credibility**

The goal of employing the detailed data collection and analysis procedures outlined in this chapter was to ensure that the study produced trustworthy findings that accurately and appropriately reflect the study participants' college choice experiences (Creswell, 2009; Miles & Huberman, 1994). Triangulation of multiple data sources, including the initial and follow-up interviews, the document reflection activity, the background information forms, and the researcher's field notes enhanced the credibility of the study by providing opportunities to corroborate evidence across sources and illuminate common themes across various participants' experiences (Creswell, 2007, 2009). For example, data from the background information forms, document reflection activity, and fields notes was analyzed in relationship to data from the interview transcripts for each individual participant as well as across all participants. Peer review and debriefing further added to the study's credibility by providing an external perspective on the research process and findings (Creswell, 2007; Glesne, 1999).

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<sup>7</sup> [http://www.rid.org/UserFiles/File/NAD\\_RID\\_ETHICS.pdf](http://www.rid.org/UserFiles/File/NAD_RID_ETHICS.pdf)

Through informal conversations, the researcher shared information about the data collected as well as the analysis and study findings with colleagues who provided feedback based on their knowledge and experience. Finally, using “rich, thick description” of the study findings provided an opportunity to “allow the reader to enter the study context” and gain an understanding of the participants’ experiences, creating a sense of realism, and thereby, enhancing the trustworthiness of the results (Glesne, 1999, p. 32).

### **Summary**

This chapter described the methodology that was used in the present study to examine the college choice process of deaf and hard-of-hearing students. Using a qualitative phenomenological design, the goal of the study was to develop an understanding of the factors that influenced the students’ college choice and to explore how deaf identity influenced their selection of a DSI. The study was conducted with deaf and hard-of-hearing freshmen baccalaureate students at a DSI in the Northeastern United States. Data was gathered using individual interviews, background information forms, a document reflection activity, and the researcher’s field notes. Data analysis involved coding the interview transcripts, background information forms, and field notes to identify central themes. Data from the document reflection activity also was categorized into themes. Triangulation of the multiple data sources and peer review enhanced the study’s credibility. The next chapter details the study findings.

## **Chapter 4: Results**

### **Introduction**

The primary purpose of this study was to investigate the college choice process of deaf and hard-of-hearing students to determine the factors that affected their college decision. A secondary purpose was to explore how deaf identity influenced students' selection of a deaf-serving institution (DSI). Deaf identity development theory, which postulates that people who are deaf or hard of hearing have varying degrees of awareness of and identification with Deaf culture and the Deaf community (Glickman, 1993), provided a lens for examining the influence of deaf identity on the study participants' college-related decision-making. This chapter presents the study findings, which are organized into four themes that describe the study participants' college choice process and the factors that played a role in their college selection. The chapter concludes with a summary.

### **Study Findings**

Data for the study was gathered across multiple sources, including two individual interviews with each study participant and the researcher's field notes. Two additional sources of data were background information forms, which were completed by each participant, and a document reflection activity. For this activity, study participants reviewed one of The University's recruitment brochures and highlighted text that appealed to them during their college search and selection process.

The study findings comprise four themes that describe the study participants' college choice process: Secondary School Influences, Preparation for Career and Life, Accommodation for and Acceptance of Individuals who are Deaf or Hard of Hearing, and Searching for Kindred. The first theme, Secondary School Influences, describes how the study participants' college choice was influenced by experiences they had in high school that were unique to their status as deaf and hard-of-hearing students. These experiences included difficulties with support and access services, teachers and fellow students who were not familiar with deaf and hard-of-hearing students' needs, communication barriers, and feelings of isolation.

The second theme, Preparation for Career and Life, describes how the study participants' college choice process was influenced by their desire, as deaf and hard-of-hearing students, to prove themselves. This theme also describes participants' wish to attend a postsecondary institution that would offer them the best opportunities for an education that would prepare them for a career and success in the future. Factors related to the theme Preparation for Career and Life that influenced study participants' college choice process included the availability of desired programs of study, institutional reputation for providing a quality education, and opportunities to participate in cooperative education experiences—all of which study participants saw as being important in preparing them, as deaf and hard-of-hearing individuals, to compete in the world of work with their hearing peers. Study participants also reported seeking a postsecondary institution that would provide opportunities for personal growth and development that would enable them to become independent adults in a world dominated by the hearing majority.

In the theme Accommodation for and Acceptance of Individuals who are Deaf or Hard of Hearing, study participants reported evaluating whether the institutions they were exploring could accommodate the unique needs of students who are deaf or hard of hearing. They also considered whether the campus communities at those institutions would be accepting of deaf and hard-of-hearing students and whether there were on-campus activities that would be open and accessible to them. The fourth theme, Searching for Kindred, describes study participants' desire to attend an institution with a significant population of deaf and hard-of-hearing students where the participants would have the opportunity to associate with students whose identity characteristics and experiences would be similar to the participants' own.

**Theme one: Secondary School Influences.** Although study participants pointed to financial considerations and location as being factors in their college choice process, experiences emerging from high school had a greater influence on their college selection. These experiences were unique to the participants' status as deaf and hard-of-hearing students and included issues related to support and access services. Study participants also reported experiences involving teachers and fellow students who were not familiar with the needs of individuals who are deaf or hard of hearing as well as experiences related to communication barriers and feelings of isolation.

In high school, study participants reported being forced to fight for recognition, support services, and personhood. They viewed selection of a DSI with a large population of deaf and hard-of-hearing students as an opportunity to free themselves from the burden of the near-constant self-advocacy that had been necessary for them to successfully navigate high school. Participants believed that attending a DSI would allow them to

focus on their own learning and growth without the added responsibility of having to educate others about their needs. They saw the selection of a DSI as an opportunity to begin a new chapter in their lives where they could pursue their education in an environment free of the challenges and barriers they had experienced throughout high school.

Study participants reported that their decision to attend a DSI was influenced by a desire to escape being singled out because of the support services they require in order to access information in the classroom. They talked about experiences they had with high school teachers who were not familiar with the unique needs of students who are deaf or hard of hearing and the burden of self-advocacy that teachers' lack of knowledge placed on the participants. For example, Ava, a 19-year-old Game Design and Development major from Massachusetts, stated:

In high school, when my schedule changed, I'd get a new teacher that had never heard of a deaf person before, so I had to explain to them, "I'm deaf; when you write on the board, you need to turn around, so I can read your lips." But all the teachers here [at The University] know that. The other students know, too. People here understand more. If I went to a mainstream college, the professors and students would be like, "What's that thing in your ear?" and I would hate it.

Ava's story demonstrates the onus of self-advocacy and fear of being singled out that deaf and hard-of-hearing students sometimes can face in mainstream education environments. Her comments also show that her decision to attend a DSI was influenced by her desire to avoid repeating experiences she had in high school with people who were not familiar with individuals who are deaf or hard of hearing. Ava and the other study

participants believed that, in choosing a DSI, they could get the education they wanted without the added challenges of having to navigate an environment where people were not prepared to provide appropriate support for deaf and hard-of-hearing students.

Study participants talked about the burden and social cost that they had experienced in high school as a result of their support service needs. They reported being made to feel embarrassed because of the services that they require in order to access information in the classroom. For example, Avery, an 18-year-old Psychology major from Connecticut, talked about having to carry a microphone with her all day, which she gave to each of her teachers at the start of every class. She stated:

In high school, the teachers wore a microphone so I could hear them talk, and I didn't want to do that anymore. When I came here, I found out I can use C-Print<sup>8</sup> instead of a microphone. It's a lot easier. I used to be so embarrassed to hand the teacher the microphone. I just didn't want to do that anymore, you know?

Avery's comments demonstrate how her experiences as a student with special needs in a mainstream educational environment influenced her decision to attend a DSI where she would not have to deal with the embarrassment and social cost associated with being the only student in the classroom who needs support services.

Study participants also reported having difficulties with high school teachers who would not provide appropriate support for them. Ella, an 18-year-old Molecular Bioscience and Biotechnology major from New York, talked about how challenges that she had experienced with teachers in her mainstream high school influenced her decision to attend a DSI. She said:

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<sup>8</sup> C-Print is a real-time captioning service.

In my high school, a lot of times my teachers were unwilling to provide support services for me because they thought I didn't need them. But I knew the professors here wouldn't question me because there's a lot of other deaf and hard-of-hearing students that need services, and they're so familiar with the disabilities office and, like, the laws and everything, you know?

Ella's statement demonstrates the importance study participants placed on attending a postsecondary institution where people would understand the needs of students who are deaf or hard of hearing so that participants could avoid having to fight, as they often had to do in high school, to get the support they need in order to be successful in their classes.

Study participants also talked about teachers who lacked the resources to provide appropriate support for them. Olivia, a 20-year-old from Pennsylvania, reported how her difficulties getting access in high school influenced her college choice. She said:

I had issues with teachers in high school where it was, like, "Hey I need captions for this or I'm not going to understand half of it." And, I mean, they did what they could, but, like, most of the time it was difficult to get captions. If I have a class here, I know I can always get captions, and then I'll be able to understand everything. That's really nice to have, whereas, if I went somewhere else, it would be difficult to get something like that.

Olivia's comments further support the point that the study participants' college choice was influenced by their desire to get an education without the added burden of negotiating a mainstream environment where people might not know how, be willing, or have adequate resources to provide appropriate support for deaf and hard-of-hearing students. The participants believed that because it is a DSI, The University would furnish

the support that would enable them to focus on their own intellectual and social development without the participants having to be responsible for educating faculty, staff, and other students about their unique needs as deaf and hard-of-hearing students.

Through the document reflection activity, study participants further demonstrated how their college choice was influenced by their desire to pursue their education in an environment where people would be knowledgeable about deaf and hard-of-hearing students. Six of the participants highlighted a passage in the brochure that states, “Access the support you need. Be part of a unique college community that understands your educational needs like no other college in the world.”

Several study participants also reported past experiences with communication barriers that influenced their decision to attend a DSI. As deaf and hard-of-hearing students, the participants already had spent much of their lives negotiating a world dominated by hearing people who often do not understand the significant communication challenges that deaf and hard-of-hearing individuals can face. Participants viewed attending a DSI as an opportunity to find some relief from the near-constant burden of having to navigate communication barriers in order to receive an education and function in social situations.

The document reflection activity provided evidence of the important role that communication concerns played in study participants’ college selection. Five of the participants highlighted testimonials from current students that are included in the brochure. These included one testimonial that states in part, “I chose [The University] because of the ease of communication on campus.” Participants also highlighted a

testimonial that says, “Everyone here is so friendly and willing to help you whenever you need it.”

During their interviews, study participants talked about the social isolation they experienced due to communication challenges in high school. For example, Beth, a 19-year-old Biomedical Engineering student from Maryland, talked about her experiences with communication issues at her mainstream high school. She stated:

I was very involved with hearing friends in high school, and I wasn’t able to keep up with the conversation, so I felt left out. I knew that I would be comfortable here and not be a loner like I would be in another college that’s all hearing.

Beth’s comments demonstrate how her desire to avoid feelings of isolation influenced her to choose a DSI where she believed she would experience fewer communication barriers than in a mainstream postsecondary setting.

Similarly, Liam, a 19-year-old student from Massachusetts, also talked about how past communication challenges influenced his decision to attend a DSI. He stated:

In high school there were times when I had trouble hearing other students or the teachers. Most of the time I was afraid to raise my hand and ask them to repeat because I was afraid that they might get annoyed. I didn’t think I would be afraid here because there are hard-of-hearing and deaf students. I assumed that the professors and students are used to it, like, they will understand. I wasn’t afraid at all like in high school because here they’re more deaf friendly.

Liam’s story illustrates how his fear of being judged for advocating too frequently for his communication needs in his mainstream high school caused him to miss information in the classroom. He believed that if he attended a DSI, people would be more

understanding of his needs, so he would feel less fearful, and, as a result, he would not miss out on important information.

Other study participants also talked about how past experiences with missing information and feeling left out influenced their decision to attend a DSI. For example, Grace, an 18-year-old from Texas who is pursuing a dual major in Chemical Engineering and Physics, said:

It's different here because I can understand a lot more. I still miss things, but there's a lot less of that if you hang around with people who, like, sign or who know how to talk with deaf people. People here are more willing to talk slower, look at you in the face, and stuff like that. I guess there's so many deaf people here that people learn how to interact with them, and so that's different from back home where people just kind of went on their merry way, and I was just, like, lost.

Grace's comments demonstrate that her experiences of not being able to follow what was being said, which led to her feeling left out, influenced her to choose a college where the community would be more knowledgeable about and willing to make adjustments to address her communication needs.

Other study participants shared similar thoughts about communication barriers that they experienced in high school. One participant, Sofia, a 19-year-old Biomedical Engineering major from New York, said:

I was the only deaf student in my school for years, and people weren't open and accepting. That really influenced my decision to come here because it would be easier to interact. Being deaf has its own difficulties with communication. It's difficult to be on top of everything. People here are willing to slow down for you

or explain, repeat, or sign, and I felt like that would influence my college experience if I had more people that understood, more people accepting deafness. Sofia's description of her experience shows the extra effort that deaf and hard-of-hearing individuals often have to expend in order to follow a conversation. It also illustrates how a deaf or hard-of-hearing student's college choice can be influenced by the desire to be in an environment where people are willing to help alleviate some of that burden by making appropriate adjustments.

The theme Secondary School Influences describes how study participants' college choice was affected by high school experiences that were unique to the participants' status as deaf and hard-of-hearing students. These experiences included challenges related to support and access services as well as teachers and fellow students who were not familiar with the needs of individuals who are deaf or hard of hearing. Study participants also shared that past experiences involving communication barriers and feelings of isolation had an effect on their college selection. The document reflection activity provided further evidence that concerns about communication and finding an environment where people would understand participants' unique needs played a role as participants explored their college options. A second theme, Preparation for Career and Life, describes additional factors that influenced study participants' college decision-making.

**Theme two: Preparation for Career and Life.** Study participants reported that their college choice process was affected by factors associated with the connection between college attendance and life outcomes. As individuals who are deaf or hard of hearing, participants indicated that their college selection was influenced by a desire to

prove themselves. They also reported wanting to choose the college that would best prepare them for success in their desired career and throughout their lives. They described consideration of various college options and how they weighed a variety of factors that they felt were strongly related to preparation for the world of work and for life as independent adults. The factors that they considered included the availability of desired programs of study, institutional reputation for providing a quality education, and opportunities to participate in cooperative education experiences—all of which study participants saw as being important in preparing them, as deaf and hard-of-hearing individuals, to compete in the world of work with their hearing peers. Study participants also reported seeking institutions that would provide opportunities for personal growth and development that would enable them to become independent adults in a world dominated by the hearing majority.

Study participants indicated that their college selection was influenced by their desire to prove to others that they could be successful. For example, Abby, an 18-year-old Mechanical Engineering Technology major from California, explained how she wanted to prove to her parents, who twice tried to get her to undergo cochlear implant surgery,<sup>9</sup> that she did not need to hear in order to succeed in college and in life. She stated:

I felt like my parents really wanted me to become hearing. I think they thought that if I was hearing, I would be successful. But now I am successful even though I don't have an implant, and I'm happy because I can show my parents that I can

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<sup>9</sup> A cochlear implant is a surgically implanted electronic device designed to produce hearing sensations by electronically stimulating nerves in the inner ear (U.S. FDA, 2010).

do everything that hearing people can do without an implant because the implant doesn't really do anything except allow you to hear.

Abby's story illustrates her desire to prove to her parents that her ability to be successful is not dependent on her hearing status. It also demonstrates that she sees her academic accomplishments and enrollment at The University as a measure of the success she has achieved thus far in her life.

Similarly, Lily reported how her desire to prove herself to her family influenced her decision to attend The University:

I wanted to be able to excel so I could prove my family wrong. So, I felt like I needed to go to [The University] because they have that whole job preparation and co-op, and I might be able to get a job right after I graduate. I've always felt like my family was sort of judging me, thinking that I'm lacking, like, not better than them in anything. My parents tend to compare me to my [hearing] siblings.

So, I'm always trying to achieve as much as possible to prove them wrong.

Lily's comments show her strong desire to prove to her family that her status as a deaf student does not limit her achievements and ability to be successful. It also demonstrates how the desire to prove herself led her to choose a college that she felt offered her the best opportunities for success in her career and in life.

***Career preparation.*** In addition to wanting to prove themselves to family, study participants expressed that, as deaf and hard-of-hearing students, their college search focused on finding a postsecondary institution that would prepare them for careers where they could compete against their hearing peers in the job marketplace. For example, as part of the document reflection activity, 13 of the participants highlighted text in the

brochure related to The University's career-focused programs. One of the passages in the brochure that participants highlighted states, "As a career-focused university, [The University] will provide you with the finest career preparation to give you a competitive edge when you graduate."

During their interviews, study participants indicated that, as they explored college options, the availability of desired programs of study was an important consideration. As deaf and hard-of-hearing students with strong academic backgrounds, they did not see their choice of majors as being limited in any way. Instead, participants sought challenging programs of study that would provide intellectual stimulation and prepare them for life in the mainstream of society where they could have productive and satisfying careers in their fields of interest. For example, Ben, an 18-year-old Mechanical Engineering/Aerospace major from New York, explained how his college search and decision-making process were influenced by his desired program of study:

I started by just getting a list of top engineering schools. Then I looked to see how many of their graduates were engineering students, and I looked at how strong their program was. The strength of the program was important. I wanted to go to a good engineering school so I felt like I was striving for something.

Ben's comments demonstrate how, as a hard-of-hearing student, his desire to seek a strong academic program influenced his college choice process. Ben and the other study participants sought a postsecondary institution where they could pursue their interests, be challenged, and prepare for satisfying careers and productive lives in a world dominated by the hearing majority. They believed that a high-quality academic program would provide them the best opportunities to prepare for the future. Participants did not want

their choices in life to be limited by their status as individuals who are deaf or hard of hearing, so they sought a top-notch education that they believed would allow them to pursue their chosen careers and build their lives as successful independent adults.

Study participants reported looking for colleges with a good reputation for providing a quality education. As deaf and hard-of-hearing students, participants sought institutions that would give them a competitive advantage in the job market following graduation. They viewed the opportunity to gain this competitive advantage as being critical to helping to level the playing field for them to compete with their hearing peers in the world of work. For example, Ben described the importance of reputation and the influence it had on his college choice, saying:

It's [The University], I mean, come on. It's such a good school for engineering that there's not many other schools that can touch it. I know people that work in engineering, and I asked them, like, "What do you think of [The University]?" And they said pretty much that if you go to [The University], you give an employer your resume, and you're hired.

Ben's statement illustrates that, as a hard-of-hearing student, institutional reputation was an important factor in his college search and selection process because of the career opportunities and advantages that can be associated with attending a college with a reputation for providing a quality education.

Similarly, Grace talked about how a college's reputation for producing high achieving deaf and hard-of-hearing graduates influenced her college choice:

A college's reputation, like, if their programs are good, is important. Like, when I told my dad I checked out [The University's] website, he was, like, "I know them;

my boss was on the alumni there. Yeah, you should go there.” So, like, you tell people, and they know somebody who went there who, like, talks about the school all the time. The reputation really carries a lot of weight.

Grace’s comments further illustrate the influence of reputation in deaf and hard-of-hearing students’ college search and selection process. An institutional reputation for providing a quality education can be particularly important to deaf and hard-of-hearing students who are seeking ways to even their odds as they pursue an education that will prepare them to compete with their hearing peers in the mainstream of society.

Through the document reflection activity, study participants reinforced the importance of receiving a quality education to prepare for a successful future. More than half of the participants highlighted a passage in the brochure that states: “Opportunities for deaf and hard-of-hearing students at [The University] are unmatched by any university in the world.” Six study participants also highlighted a passage in the brochure that states: “Close your eyes. Picture your future. Imagine success. A degree from [The University] can take you anywhere you want to go, including places you’ve never dreamed of.” This further demonstrates the importance that study participants placed on receiving a quality education that would allow them to fulfill their potential and prepare them for a successful career and life that is not limited by their status as individuals who are deaf or hard of hearing.

Study participants also indicated that the opportunity to participate in cooperative education experiences was an important component of their decision-making process, which, again, pointed to their desire, as deaf and hard-of-hearing students, to pursue an education that would give them a competitive advantage in the employment marketplace.

For example, Ava talked about why she felt opportunities for cooperative education experiences were important:

Well, yeah, I knew [The University] had the co-op, which obviously was amazing because you get a co-op assignment with a good company and, like, years later, you come back and apply for a real job, and they will remember you, and it's easier to get in.

Ava's statement shows that the idea of "getting a foot in the door" may be particularly important for deaf and hard-of-hearing students as they look for ways to vie for career opportunities with their hearing peers.

As part of the document reflection activity, 13 study participants highlighted text in the brochure related to The University's emphasis on hands-on education and cooperative education experiences. One passage that participants highlighted states: "Co-ops are a great way to develop connections and relationships that can help advance your career, add depth to your resume, and make you more marketable." By highlighting passages such as this, study participants showed that they believed that, regardless of their hearing status, The University would provide them opportunities that are afforded to all students to network and prepare for a career.

Ella not only highlighted that passage, she also wrote a note to illustrate the importance of career preparation as a factor in her college choice. She wrote:

Networking = Career! I met a couple whose son graduated from [The University] and was working on a BIG project at Apple. I was amazed! It happened right before I needed to make my decision. He was also making a lot of money!

In writing this note, Ella illustrated how The University's emphasis on career preparation for deaf and hard-of-hearing students influenced her college decision, reinforcing the importance that study participants placed on selecting a college that would prepare them to succeed in their careers and in life.

Beyond academics and career preparation, study participants noted that, in searching for and selecting a college, they were looking for a place that would offer them the best opportunities for personal growth. They also expressed a desire to attend an institution that would help them become independent. Through the document reflection activity, study participants revealed the importance of personal growth by highlighting text related to opportunities to try new things. For example, one passage they highlighted states, "At [The University], you'll get opportunities—lots of them. Education here is as unique as your goals."

In their interviews, participants expressed a desire for new experiences that would expand their knowledge of themselves and others. For example, Grace described the importance of the growth opportunities that college provides, saying:

There are things that college teaches you that you wouldn't have learned otherwise, like your breaking points and where you draw the line and how you deal with stress. It definitely measures how well you can adjust quickly to things; it's definitely a measure, like a test of yourself, if anything.

Grace's statement demonstrates that students see college as an opportunity to learn more about themselves and their capabilities. This may be particularly important to deaf and hard-of-hearing students as they seek growth opportunities that allow them to challenge themselves and build their confidence in preparation for life as independent adults.

Through their interviews and the document reflection activity, study participants revealed factors related to the theme Preparation for Career and Life that influenced their college choice process. As individuals who are deaf or hard of hearing, participants reported that their college choice was influenced by a desire to prove themselves. They described how they weighed a variety of factors that they felt were strongly related to preparation for the world of work and for life as independent adults. The factors that they considered included the availability of desired programs of study, institutional reputation for providing a quality education, and opportunities to participate in cooperative education experiences—all of which study participants saw as being important in preparing them, as deaf and hard-of-hearing individuals, to compete in the world of work with their hearing peers. Study participants also reported seeking an institution that would provide opportunities for personal growth and development that would enable them to become independent adults in a world dominated by the hearing majority. A third theme, Accommodation for and Acceptance of Individuals who are Deaf or Hard of Hearing, captures additional factors that played a role in study participants' college choice process.

**Theme three: Accommodation for and Acceptance of Individuals who are Deaf or Hard of Hearing.** Study participants reported that, as part of their college search and selection process, they considered whether the various institutions they were exploring could accommodate their unique needs as deaf and hard-of-hearing students. They also evaluated whether the campus communities at those institutions, including faculty, staff, and other students, would be accepting of them. Participants wanted the quality education and preparation for a successful future described in Theme Two, but without the added burden of negotiating a mainstream environment where people might

not know how, or be willing, to provide accommodations for them. Study participants also considered whether there would be on-campus activities that would be accessible to them as deaf and hard-of-hearing students.

Factors related to the theme Accommodation for and Acceptance of Individuals who are Deaf or Hard of Hearing that influenced study participants' college choice process included the availability and quality of access and support services as well as the ease of getting those services. Study participants reported that they wanted to be sure that the college they selected provided high quality services that would meet their needs and allow them to be successful. The participants had varying access and support services requirements, but most reported seeking one or more of the following services: sign language interpreters, real-time captioning, note takers, and/or tutoring.

Participants made determinations about the quality and availability of access and support services at various institutions in a variety of ways, including the ease of finding information about services on institutions' websites, reports from other deaf and hard-of-hearing students who visited or attended the institutions the study participants were exploring, and the ease of getting services when participants' made campus visits. Study participants also evaluated the quality and availability of access and support services based on the level of experience a given institution had in providing services for deaf and hard-of-hearing students. Participants sought an institution where they would not experience anxiety over getting reliable access services. They believed that an institution with a lot of experience providing such services would be more likely to provide quality services with fewer problems than institutions that were not accustomed to providing services for deaf and hard-of-hearing students.

Comments by Ella illustrate the influence that access and support services had on her college search and selection process:

Being a hard-of-hearing student and looking at colleges is definitely interesting because you know that you need more support as a hard-of-hearing student. I knew that I was going to get that support here and that I wouldn't get such high quality and easy support at any other school. Because this school is set up to serve deaf and hard-of-hearing students, the access services would already be provided.

It was very important for my college to be experienced and know what I need.

Ella's comments make clear that the availability and quality of access services were an important consideration in her college search process and in her selection of a DSI that has significant knowledge of and experience providing services for deaf and hard-of-hearing students.

Jacob, an 18-year-old Physics major from Maryland, talked about his experience with another institution he had considered, but decided against due to concerns regarding access services. He stated:

I decided not to go to [a mainstream university in his home state] mainly because of the access services. I did some research, and I couldn't find anything on the Internet. And people who had visited [that school] had told me that the interpreters never show up and all these other negative things and that the access services weren't good, so I decided it wouldn't be a good choice.

Jacob's statement further demonstrates that the availability and quality of access services is an important factor in the college choice process for deaf and hard-of-hearing students, and that perceived unavailability or poor quality can cause students to remove certain

postsecondary institutions from consideration. His comments and those of the other study participants demonstrate that participants were active consumers in their college search process. They were astute and empowered enough to take responsibility and assess disability services as part of their college decision-making.

The document reflection activity provided further evidence that the availability and quality of access and support services was an important factor in study participants' college choice process. All 15 participants highlighted a section in the brochure that's titled "Outstanding Support and Access Services," and text that states: "You can request sign language interpreting, real-time captioning services, FM systems, and note taking," as well as a passage that states: "The services and support we provide translate into real success for you." By highlighting text related to support and access services, study participants demonstrated that these services were an important consideration as they evaluated their postsecondary options. As deaf and hard-of-hearing students, the participants grew up experiencing the challenges of living in a world not always equipped to provide the services and support they need. Study participants valued the convenience of having easy access to support services and saw that as a benefit of attending a DSI.

Ava explained how having easy access to support services influenced her college decision:

As a deaf person, I need help. At [another college she considered], I can get access services, but it would be harder. I'd have to go through, like, the school and the government or something. Here at [The University], I can go online, and click, click, click, submit, and it's done. It's really easy here.

Ava's description shows the value that she placed on having easy access to needed support. Ava and the other study participants did not want to have to deal with a burdensome process in order to ensure access to their education.

Beth also talked about why choosing a DSI and having easy access to support services was important to her:

It relieves some of the worry and stress about the interpreters or getting the support I need because they already have everything here for you. It reassures me knowing that there will always be someone or something that will be able to help me through the classes and the courses and the years.

Beth's statement demonstrates that the support that DSIs offer students who are deaf or hard of hearing was a factor in her college choice because she did not want to experience anxiety over having reliable access services. This illustrates the concerns that deaf and hard-of-hearing students can have about having to negotiate mainstream educational environments. Study participants chose a DSI so they could focus on getting an education rather than having to concern themselves with fighting to get reliable access to their education.

***Feelings of belonging.*** Study participants also evaluated whether the campus communities at the colleges they were considering would be accepting, welcoming, and open-minded with regard to individuals who are deaf or hard of hearing. Participants wanted to attend a college where they would feel like they belonged and where they would not be seen as less qualified than their hearing peers. They also wanted to know that their needs would be understood and that people, including faculty, staff, and other students, would be willing to accommodate them. For example, Abby stated:

I wouldn't be successful if I went to a college that didn't have people familiar with interacting and communicating with deaf people. If I went to some other college, I probably would be the only deaf student, and people wouldn't know about Deaf culture, and they might think that I was dumb because I am deaf.

Abby's comments demonstrate that attending a DSI where people are familiar with individuals who are deaf was an important factor in her college choice. She feared attending a mainstream institution where the campus community might stereotype deaf and hard-of-hearing students as being less intelligent or less capable than their hearing peers.

Beth shared similar thoughts regarding attending a DSI rather than a mainstream college where people might stereotype or not accept her:

If I went to a hearing college, they probably would be wondering what am I doing there. But here they see so many deaf people, they realize that they are smart, they have a good intelligence, and they're regular people, but they just cannot hear. Also the hearing culture here are very accepting; they are very welcoming; they are very open-minded, too. They don't really care about having deaf people in class or having an interpreter interpret for them. It's very nice.

Beth's comments further illustrate the importance that study participants placed on attending a college where the campus community is understanding and accepting of individuals who are deaf or hard of hearing.

Study participants also reported that it was important to them that the professors at the college they chose to attend be understanding and willing to accommodate their needs. As the participants prepared to face a new and challenging education environment

at college, they wanted reassurance that the teachers they would be depending upon for their learning would be experienced in working with students with special needs. For example, Ben talked about how he had considered that, because the professors at The University had experience working with deaf and hard-of-hearing students, they would be more helpful to him:

The professors here are more understanding and more willing. They already understood from past students that came here what the students would need; how to accommodate them so that they are set up to succeed here. I thought of that a lot when I was looking at colleges.

Ben's comments illustrate that having professors and a campus community that are understanding and accommodating is an important factor in the college search and selection process for students who are deaf or hard of hearing. Ben's comments also demonstrate that study participants wanted to be able to access their education in an environment where their needs were understood and the necessary accommodations would be provided without a lot of extra effort on their part.

Another factor that influenced study participants' college choice process was whether there were activities available on campus that matched participants' interests and were open and accessible to individuals who are deaf or hard of hearing. Participants were eager to become involved in campus life. They did not see their deafness as a barrier and expected that they would be full participants in activities at the college they selected. Through the document reflection activity, participants revealed the importance to them of the availability of activities by highlighting text related to campus life. For example, one passage that nine participants highlighted states:

At [The University], there are so many activities that are open and accessible to deaf, hard-of-hearing, and hearing students that you may have difficulty deciding what to do first. You can choose from on-campus fraternities and sororities, more than 200 clubs and organizations, NCAA Division III intercollegiate sports, student government, and an interfaith religious center. In addition, [The University] offers a creative arts program, including theater, dance, and music.

By highlighting passages such as this, study participants demonstrated that the availability of activities on campus that were open and accessible to them as deaf and hard-of-hearing students was an important consideration in their college search and selection process.

During their interviews, study participants reinforced the importance to them of the availability of activities on campus. For example, Grace stated:

I remember looking at, like, what kind of other stuff, like, extracurricular stuff, various colleges offered, 'cause, like, you don't want to go to a campus that's kind of boring. I wanted a nice college experience. There's, like, a lot of clubs and activities here at [The University], like a ton. There's stuff happening every week, so it's always pretty easy to go out and find something to do, that's not an issue.

Grace's statement makes clear that, in searching for colleges, she was looking for a lively campus that would provide opportunities for her, as a deaf student, to participate in activities and have fun.

The theme Accommodation for and Acceptance of Individuals who are Deaf or Hard of Hearing describes factors that study participants indicated were important to them in their college search and selection process. Things that study participants reported

as influential included the availability and quality of access and support services as well as the ease of getting the services they need. Participants also considered whether the campus community was understanding and willing to make necessary accommodations for individuals who are deaf or hard of hearing. The availability of on-campus activities that would be accessible to the study participants as deaf and hard-of-hearing students also was a consideration in their college choice process. A fourth, and final, theme, Searching for Kindred, describes additional factors that affected study participants' college-related decision-making.

**Theme four: Searching for Kindred.** Study participants indicated that their college choice was influenced by a desire to attend an institution where there would be other students like them. As deaf identity development theory suggests would be the case, participants reported having varying degrees of awareness of and identification with Deaf culture and the culturally Deaf community (Glickman, 1993). They also expressed varying levels of interest in having the opportunity to experience or be involved in Deaf culture. However, all of the participants reported an interest in having the opportunity to attend a college where there would be other students whose identity characteristics and experiences were similar to their own.

The background information form completed by each of the study participants provided information about their awareness of and identification with Deaf culture. The form asked whether participants were familiar with Deaf culture and whether they considered themselves to be members of the culturally Deaf community. Their responses to those two questions are shown in Table 4.1.

Table 4.1

*Familiarity with Deaf Culture and Membership in the Culturally Deaf Community*

Pseudonym	Familiar w/Deaf Culture	Member of the Culturally Deaf Community
Abby	Not Sure	No
Ava	Yes	Not Sure
Avery	Yes	Not Sure
Ben	Yes	No
Beth	Yes	Yes
Dan	Yes	Not Sure
Ella	Yes	Not Sure
Grace	Yes	Not Sure
Jacob	Yes	Yes
Jim	Yes	Not Sure
Liam	Not Sure	Not Sure
Lily	Not Sure	Yes
Noah	Yes	Yes
Olivia	Yes	No
Sofia	Yes	No

Abby, Liam, and Lily responded that they were not sure whether they were familiar with Deaf culture, while the remaining participants all indicated that they were familiar with it. Beth, Jacob, Lily, and Noah all indicated that they considered themselves members of the culturally Deaf community, while Abby, Ben, Olivia, and Sofia all responded that they do not consider themselves members. The remaining seven

participants indicated that they were not sure whether they considered themselves members of the culturally Deaf community. Understanding study participants' awareness of and identification with the culturally Deaf community is important because it provides context for understanding identity-related reasons for their selection of a DSI. In choosing to attend a DSI, study participants believed that there would be students with a range of deaf and hard-of-hearing identities and that this would allow the participants to feel accepted regardless of their own identity. They saw a DSI as a place where they would be able to associate with other students whose identities and experiences were similar to their own.

For example, Sofia indicated that being part of the Deaf community is not a priority for her. However, she believed that attending a DSI would provide opportunities to associate with other students like her. She stated:

The way I perceive Deaf culture is that it's solely dependent on ASL, and they kind of isolate themselves away from the hearing community. I don't feel like that's my kind of thing. I never felt like I wanted to be part of it because I never felt like I wanted to move myself away from the hearing world. I respect their traditions; I just don't partake in them. When I came here for college, I didn't really consider being part of Deaf culture; I just wanted the deaf people.

Sofia's comments illustrate that her decision to attend a DSI was not influenced by a desire to be part of the culturally Deaf community, but rather, by her desire to associate with other students who, like her, are deaf, but who are not necessarily culturally Deaf.

Other study participants, however, who indicated that they consider themselves to be members of the Deaf community, reported that one of the reasons they chose a DSI for

college was because they wanted to attend an institution that would allow them to associate with other students who also are culturally Deaf. For example, Jacob said,

I was born deaf and grew up in a Deaf world. All my friends growing up were deaf and involved in Deaf culture. Some of them even came from very big Deaf families. So, I'm very confident in my Deaf identity, and I wanted to socialize with other people who are like me.

Jacob's statement illustrates that, as a culturally Deaf individual, his college choice was influenced by his desire to attend an institution where there would be other culturally Deaf individuals like him with whom he could socialize and feel comfortable.

Noah, an 18-year-old Computing Security major from Illinois, shared similar thoughts about choosing a DSI because he felt like he would feel comfortable there:

If I went to a mainstream college, it would be all hearing students. Here, there are both deaf and hearing students. That's what I wanted, and it fit me. Attending a college where there are other deaf students is where I feel most comfortable. I have Deaf parents, and I was taught to be proud of who I am. I feel like I fit in both the Deaf and hearing communities because I have the ability to communicate with both equally, but I'm not trying to be hearing.

Noah's statement demonstrates how his college selection was influenced by his desire to be in an environment that he felt would be a good fit for him—an environment where there would be other culturally Deaf students like him, but also students with other identities, including hearing students.

Those study participants who said they were not sure whether to consider themselves members of the Deaf community reported that they chose to attend a DSI

because they wanted the opportunity to learn more about Deaf culture and about themselves. For example, Dan, a 19-year-old Criminal Justice major from Connecticut, said,

Learning about Deaf culture was a really big interest to me, and there was a lot of access to Deaf culture here. I came here because I kind of wanted the opportunity to learn about myself. Before I came here, I didn't have a lot of deaf friends, so I didn't know much about Deaf culture and stuff like that.

Dan's comments show that, as a student without much prior knowledge of or experience with the culturally Deaf community, he viewed the opportunity to attend a DSI as a chance to learn more about Deaf culture and to explore and develop his identity as a culturally Deaf person.

Similarly, Liam reported that his desire to learn more about Deaf culture influenced his decision to attend a DSI. He stated, "I just thought that being in a Deaf community could be a different experience. I thought I could learn a lot of things about Deaf culture because I didn't really know a lot about it." Liam's comments further illustrate that study participants who previously were unfamiliar with Deaf culture viewed choosing a DSI as an opportunity to learn about Deaf culture and, perhaps, find a cultural community where they would fit in and feel comfortable.

Regardless of their actual or desired level of identification with the culturally Deaf community, all of the study participants indicated that their college choice was influenced by their desire to attend an institution where there would be other students whose identity characteristics and experiences were similar to their own. Study participants reported that it was important to them to attend a college where there would

be people they could feel comfortable with and relate to, people who could understand their unique experiences as students who are deaf or hard of hearing. For example, Ava stated:

It's important for me to be with others who are like me, who understand. Like, I have a roommate who's hard of hearing, and she prefers to talk, too. Sometimes she expressed the same thing, like, she had some hearing friends, and they'd be, like, "Never mind" when she missed what they said. So, we talk about that. It's nice to have people that understand because a hearing person won't understand fully. They can get it, but they can never understand on a personal level.

Ava's comments demonstrate that it was important to her to attend college where there would be other deaf and hard-of-hearing students who had experiences similar to hers. Her comments also illustrate that study participants viewed a DSI as a place where they could socialize with other students who would truly understand the challenges that they have faced as deaf and hard-of-hearing students.

Ben, who describes himself as hard of hearing, prefers to communicate using spoken English, and does not consider himself part of the culturally Deaf community, shared similar thoughts regarding his desire to attend a college where there would be other students who would understand what he has experienced:

When I was growing up I never really had another person going through the same thing as me. All my friends were hearing, and they didn't, like, get that I had that little bit of extra difficulty growing up. So, I just kind of wanted to see how I matched up with other people who had experienced the same thing, who had become deaf at 2, got their [cochlear] implant, and went to mainstream schools.

Ben's story illustrates how, after growing up with friends who all were hearing, he wanted to attend a college that would allow him the opportunity to be with other hard-of-hearing students who had experienced challenges growing up that were similar to his. Ben's comments also demonstrate the feelings of isolation and sense of being different from everyone else that deaf and hard-of-hearing students can experience when they grow up and are educated in environments surrounded only by hearing people.

Liam also talked about wanting to attend a college with other deaf and hard-of-hearing students because he believed that doing so would help him fill a gap that he perceived to be present in his life when he was growing up. He stated:

Well, I have, in my whole life, only had one hard-of-hearing friend, so I came here hoping to meet some deaf or hard-of-hearing friends. I just felt that, coming here, it would be much easier to make friends with the hard-of-hearing or deaf community because we have something in common, and it's possible that we could relate to a lot of stuff through past experience and maybe interests.

Liam's statement demonstrates that his college decision was influenced by a desire to meet and develop friendships with other students to whom he could relate and who could relate to him. His comments also illustrate the strong desire that deaf and hard-of-hearing individuals can have to associate with others who are like them. Growing up in hearing families, attending mainstream schools, and having little contact with other deaf and hard-of-hearing individuals led study participants like Liam and Ben to choose a DSI where they would be in an environment where they no longer would feel like they were "the only one."

Another participant, Lily, talked about how her college decision was influenced by the fact that she is uncertain about her identity and wanted to attend a college where she could feel comfortable and find herself:

I came to [The University] because it was a place where I can feel at home and be myself and be comfortable with who I am and find myself. I sort of don't really trust what I am, so I sort of have to pick the common thread when I'm around hearing and deaf people. Here, it's the best of both worlds, so I don't feel like I have to alternate back and forth. I can just stay as one true person and be comfortable. I don't have to change to match anyone else, so I feel myself here.

Lily's story demonstrates how the uncertainty and identity confusion that she faced in the past led her to choose a college where she felt that she could fit in, feel comfortable, and find herself.

Similarly, Ben described how his desire to figure out his identity influenced his college decision:

I'm not part of Deaf culture because I don't sign, I can hear, and I speak. But, I'm not really part of the hearing world because I don't have all of my hearing. I'm closer to the hearing world, but I'm kind of in the middle. I knew that if I came here, there would be other people here that went through the same thing and don't know exactly where they fit in—there'd be other kids like me who I can share my experience with and try to understand better where I am, what I belong to.

By sharing his story, Ben showed that his college selection was influenced by his desire to better understand his identity by being with other students with experiences similar to his own. Ben's comments and those of the other study participants demonstrate that,

regardless of whether students identify as deaf or hard of hearing and/or as members of the culturally Deaf community, the desire to attend college with other students who share their identity characteristics and who have had similar experiences was a factor in the study participants' college choice process.

The document reflection activity provided further evidence of study participants' desire to attend a college where there would be other students like them. Eleven participants highlighted text in the brochure related to the diverse campus community, the deaf and hard-of-hearing students who attend The University, and the deaf and hard-of-hearing population in the community where The University is located. For example, a number of study participants highlighted a passage in the brochure that states:

Our community includes a broad mix of students with various communication styles in American Sign Language, English, and spoken communication. Many students call [The University] the best of all worlds because our campus offers opportunities to live, study, work, and socialize with deaf, hard-of-hearing, and hearing students, faculty, and staff. There are more than 1,300 deaf and hard-of-hearing students at [The University].

Through the document reflection activity and their interviews, study participants revealed factors related to the theme Searching for Kindred that influenced their college choice process. Regardless of their actual or desired level of identification with the culturally Deaf community, all of the study participants indicated that their college choice was influenced by their desire to attend an institution where there would be other students whose identity characteristics and experiences were similar to their own. Some

participants also expressed a desire to learn more about themselves and explore aspects of their deaf identity.

### **Summary**

The purpose of this study was to examine the college choice process of deaf and hard-of-hearing students to determine the factors that influenced their college selection and to explore how deaf identity influenced the students' selection of a deaf-serving institution. Analysis of the data collected for this study revealed four themes that describe the study participants' college choice process: Secondary School Influences, Preparation for Career and Life, Accommodation for and Acceptance of Individuals who are Deaf or Hard of Hearing, and Searching for Kindred. A discussion of the implications of these findings and recommendations for future research are included in the next chapter.

## **Chapter 5: Discussion**

### **Introduction**

The present study used a qualitative phenomenological research design to investigate the factors that influence deaf and hard-of-hearing students' college search and selection process. The study addressed two questions. The first of these was: How do deaf and hard-of-hearing students describe the factors that influenced their college choice? The second question was: In what ways does a deaf or hard-of-hearing student's deaf identity influence the selection of a deaf-serving institution (DSI)?

What follows is a discussion of the implications of the study findings. Also included in this chapter are a discussion of the limitations of the study and recommendations for future research as well as recommendations, based on the study findings, for students and parents, P-12 educators, policymakers, and postsecondary institutions. The chapter ends with a conclusion that summarizes the study.

### **Implications of Study Findings**

Several of the findings of the present study are consistent with those of other studies in the college choice literature. For example, the finding that deaf and hard-of-hearing students' college choice is influenced by factors such as the availability of desired programs of study, institutional reputation for providing a quality education, and opportunities for personal growth and development is similar to the findings of Goldstein (2001), Menchel (1995), and Smith (2004), who all found these factors to be influential in deaf and hard-of-hearing students' college choice. Burlison (2010), Dolinsky (2010),

Herren, Cartmell, & Robertson (2011), Johnson, Jubenville, & Goss (2009), and Pauline (2010) also found these factors to be influential in the college search and selection process of the general student population. Thus, the findings of the present study suggest that some of the factors that influence deaf and hard-of-hearing students' college choice process are similar to those that affect their hearing peers' college decisions.

The present study's finding that deaf and hard-of-hearing students' college choice is influenced by the availability and quality of access and support services also is similar to findings of other studies in the literature. For example, Barnhart (1991) and Foster and Elliott (1986) found that these factors affected the college-related decision-making of the deaf and hard-of-hearing participants in their studies. Research by Goldstein (2001) and Smith (2004) also demonstrated that these factors were influential in students' college selection.

The present study's finding that the study participant's college choice was influenced by their desire to attend an institution where there would be other students whose identity characteristics and experiences were similar to the study participants' own is consistent with Karp, Holmstrom, and Cray's (1998) contention that, in searching for a college, students are looking for a good fit—a place where they will feel comfortable, where there are other students who are like them. The present study's findings are consistent with those of Call (1992), Menchel (1995), and Smith (2004), whose study results also suggest that finding a good fit is a consideration in deaf and hard-of-hearing students' college-related decision-making. Barnhart (1991), Call, Foster and Elliott (1986), and Smith all found that the desire to attend college with other deaf and hard-of-hearing students was a factor in their study participants' college choice. These findings

also are consistent with those of Freeman (1999) and Van Camp, Barden, Ren Sloan, and Clarke (2009), who found that sociocultural identity influences may be particularly influential in students' consideration of, and decision to attend, a minority-serving institution (MSI).

In addition to serving the educational needs of minority students, MSIs also help address students' social and cultural identity needs (Raines, 1998; Staten et al., 2009). DSIs serve similar roles for deaf and hard-of-hearing students (Foster & Elliott, 1986). The results of the present study point to the importance of educational environments where people understand and can appropriately serve the needs of deaf and hard-of-hearing students. The results also point to a fundamental role for DSIs in higher education, serving deaf and hard-of-hearing students' educational needs as well as their sociocultural identity needs and providing an environment where they can interact with other deaf and hard-of-hearing students.

**Implications for theory.** The theoretical framework for the present study was deaf identity development (DID) theory, which postulates that people who are deaf or hard of hearing have varying degrees of awareness of and identification with Deaf culture and the Deaf community (Glickman, 1993). The theory is helpful in conceptualizing that there are a range of deaf identities, and, as a result, it provided a useful lens through which to examine the college choice process of deaf and hard-of-hearing students. However, the theory was developed in 1993 with study participants who, at the time, ranged in age from 18 to 75, which means they were born between 1918 and 1975. Glickman's (1993) conceptualizations of deaf identities and the deaf identity development process were based on subjects who had grown up well prior to the 1990

passage of the Americans with Disabilities Act (ADA) in an environment markedly different from the present day. The participants in the present study all were born between 1993 and 1995 and had the benefit of growing up in a post-ADA era where people, including parents, educators, and policymakers, have a better understanding of deafness. This suggests a need to revisit DID theory to determine if the theory's conceptualizations of deaf identities should be modified to reflect the experiences of deaf and hard-of-hearing individuals who have grown up in a society that is more enlightened about their needs and capabilities and that is more likely to make appropriate accommodations for them.

### **Limitations**

As with any research, the present study has limitations. Because there were only a small number of participants, and all of them attended a single DSI, the results of the study are not generalizable to the entire population of deaf and hard-of-hearing students or even to those who attend another DSI. A larger study with a randomly selected representative sample could provide information on the factors that influence deaf and hard-of-hearing students' college choice that would be generalizable to the U.S. population of deaf and hard-of-hearing students. Such a study, however, would not provide the same opportunity as the present study for in-depth exploration of the study participants' unique college choice experiences.

Another limitation of the present study is that the participants were asked to recall their college choice process after the fact. Although freshman students were selected for the study, more than a year had passed since they actually had been involved in their college search. Therefore, they may not have remembered all of the details of the process

that they engaged in while exploring college options and making their final choice. It may be, however, that participants in the present study were better able to articulate the factors that had been most important in their college-related decision-making because the time that had elapsed had given them an opportunity to reflect on their college search and selection process.

It also must be noted that the present study did not investigate all of the variables that can influence students' college choices. For example, many student and family characteristics, such as socioeconomic status and parental educational levels, are known to influence college choice (Engberg & Wolniak, 2009, 2010; Mattern & Wyatt, 2009; Perna & Titus, 2004). Characteristics of a student's high school, such as availability and quality of counseling services and overall academic quality also can be influencing factors in students' college-related decision-making (Engberg & Wolniak, 2009, 2010). Although it did not investigate all of the factors that are known college-choice influencers, the present study provided an opportunity for the study participants to report those factors that were most important to them as they considered their college choice options.

### **Recommendations**

The findings of the present study lead to a number of recommendations for students and their families as well as teachers, counselors, and other professionals who work with deaf and hard-of-hearing students. The findings also lead to recommendations for executive leaders at mainstream postsecondary institutions and DSIs as well as for policymakers and Vocational Rehabilitation personnel. These recommendations are outlined in this section along with recommendations for future research.

**Students and parents.** The findings of the present study suggest that, regardless of their background and how they identify, deaf and hard-of-hearing students want the opportunity to associate with other students who are like them. This points to the importance for students and their parents of seeking opportunities to gather with other deaf and hard-of-hearing students, whether through educational environments, organizations, or informal means. This suggests that parents should carefully weigh P-12 education options for their children, evaluating which environments can best provide for their children's academic as well as social needs. Organizations such as the Alexander Graham Bell Association ([agbell.org](http://agbell.org)), the National Association of the Deaf ([nad.org](http://nad.org)), and Hands and Voices ([handsandvoices.org](http://handsandvoices.org)), which provide support for deaf and hard-of-hearing individuals and their families, also provide opportunities for deaf and hard-of-hearing students to gather with their peers.

**P-12 educators.** The findings of the present study also point to a need for educators to consider how deaf and hard-of-hearing students' need for interaction with deaf and hard-of-hearing peers can best be met in mainstream P-12 school environments. Given that deafness is a low-incidence disability, there may be small numbers of deaf and hard-of-hearing students in individual schools (U.S. Dept. of Education, n.d.). Educators and policymakers should provide opportunities for deaf and hard-of-hearing students to gather with peers within their school district or in neighboring districts to ensure that their social as well as educational needs are being met.

**Policymakers and Vocational Rehabilitation personnel.** Recent across-the-board reductions in the federal budget, which were the result of the Balanced Budget and Emergency Deficit Control Act, commonly known as sequestration, led to budget cuts of

nearly \$10 million for the nation's DSIs and \$160 million for the Department of Education's Vocational Rehabilitation Services unit (U.S. OMB, 2013). These indiscriminate budget reductions could have a negative impact on the DSIs' operations and the ability of students to cover the cost of attendance (National Council on Disability, 2013). The results of the present study, however, point to a fundamental role for DSIs in higher education, serving deaf and hard-of-hearing students' educational needs as well as their sociocultural identity needs and providing an environment where they can interact with other deaf and hard-of-hearing students. This suggests that policymakers and Vocational Rehabilitation personnel should not allow indiscriminate budget reductions to prevent provision of adequate financial support for DSIs and the students who wish to attend them.

**Executive leaders at mainstream postsecondary institutions.** The findings of the present study suggest that the availability and quality of access and support services is an important consideration in deaf and hard-of-hearing students' college selection. This points to a need for executive leaders at mainstream postsecondary institutions to ensure that they have the necessary resources to provide support services of the appropriate type and quality for deaf and hard-of-hearing students who wish to attend. In addition, the findings of the present study suggest that deaf and hard-of-hearing students are judging the quality and availability of access services at various institutions based at least in part on the information they are able to find online. Therefore, the disabilities services offices at mainstream colleges and universities should ensure that adequate information about support services is available on the Web where it can easily be accessed by prospective students as they are considering their college options.

The present study also found that deaf and hard-of-hearing students want to attend postsecondary institutions where faculty members understand and can appropriately accommodate their needs. This suggests that mainstream institutions should provide training for faculty who have deaf and hard-of-hearing students in their classrooms to ensure that the faculty members can create an environment that is accessible and welcoming. DeafTec (deaftec.org), a National Science Foundation Advanced Technological Education National Center of Excellence, located at Rochester Institute of Technology's National Technical Institute for the Deaf (RIT/NTID), serves as a resource for colleges that educate deaf and hard-of-hearing students. Project Access (<http://deaftec.org/project-access>), another program housed at RIT/NTID, also provides information to assist college faculty members in adapting their classroom teaching style to accommodate deaf and hard-of-hearing students. New River Community College and Northern Virginia Community College both have handbooks (<http://www.nr.edu/cdhh/pdfs/handbookfaculty.pdf>, <http://www.nvcc.edu/current-students/disability-services/interpreter-services/tipsforteachers.pdf>) that provide information for college instructors on how to work with deaf and hard-of-hearing students. Executive leaders at mainstream postsecondary institutions should ensure that their faculty members have access to resources such as these to ensure that they are able to foster the success of deaf and hard-of-hearing students who take their classes.

**Executive leaders at DSIs.** The results of the present study suggest that executive leaders at DSIs should ensure that their recruitment materials provide information for prospective students regarding all of the benefits of attending such institutions. In particular, DSIs should ensure that prospective students receive information about the

benefits of DSIs that this study identified as being most important to students, including the availability and quality of access services, accepting campus community, and the opportunity to study with other students like themselves. It is important to point out that the majority of deaf and hard-of-hearing students now attend mainstream P-12 institutions (Walter, 2010), which makes it difficult for DSIs to identify them and provide information to them. Therefore, teachers and counselors, government agencies, Vocational Rehabilitation personnel, and other professionals should ensure that deaf and hard-of-hearing students and their families receive information about all of their postsecondary education options, including DSIs. The U.S. Department of Education and Vocational Rehabilitation offices should provide funding to support the sharing of such information with students and their families.

**Future research.** The paucity of current research on deaf and hard-of-hearing students in the college choice literature and the results and limitations of the present study suggest a need for further research in this area. One recommendation for future research would be to expand the current line of inquiry by conducting a larger study with more participants and with students who attend both of the DSIs in the United States. Such a study would provide the opportunity to compare the experiences of students from both DSIs to determine the similarities and differences in the factors that influenced their college selection. This could provide information that would be useful in helping students and their families choose the DSI that would be most appropriate for them. It also could provide information that would further affirm the important role in higher education of DSIs, which address students' educational as well as sociocultural identity needs.

There also would be value in conducting a study that compares the college choice processes of deaf and hard-of-hearing students who elect to attend a DSI with those who select mainstream postsecondary institutions. Such a study would help determine similarities and differences in student-related and institution-related factors that influence each group's college selections. This could provide information that would be useful in helping students and their families choose an appropriate postsecondary environment, which is important because good student-university fit leads to increased satisfaction and has a positive effect on college completion (Braxton, Vesper, & Hossler, 1995).

Another recommendation is to conduct a longitudinal study that follows deaf and hard-of-hearing students throughout high school as they are going through the college search and selection process in real-time. This would contribute to the college choice literature by helping to further illuminate the college choice experiences of deaf and hard-of-hearing students. It also would address a limitation of the present study, which, as already noted, asked participants to recall their college search and selection process after the fact.

Additionally, it would be valuable to conduct a longitudinal study to see how students fare throughout their college careers. Such a study would be an opportunity to explore how deaf and hard-of-hearing students' college choice affects their persistence to graduation. This, again, would provide information that could be useful in helping students and their families make appropriate postsecondary decisions.

A final recommendation is to conduct one or more studies designed to test and, perhaps, revise DID theory. A study or studies of that nature could test the validity of Glickman's (1993) Deaf Identity Development Scale as well as helping to determine

whether the theory's conceptualization of the deaf identity development process remains accurate in today's environment. This is important given changes in our society since development of the theory in 1993.

## **Conclusion**

Student-university fit leads to increased satisfaction with the postsecondary institution that a student selects and has a positive effect on college completion (Braxton, Vesper, & Hossler, 1995). As an increasing number of deaf and hard-of-hearing students are electing to participate in postsecondary education (Newman, Wagner, Cameto, Knokey, & Shaver, 2010), the relationship between college choice and college completion points to a need to better understand how deaf and hard-of-hearing students are making their college decisions. There are, however, few current studies of deaf and hard-of-hearing students in the college choice literature.

To help address the dearth of research in this area, the present study used a qualitative phenomenological research design to investigate the factors that influence deaf and hard-of-hearing students' college search and selection process. The theoretical framework for the study was deaf identity development theory, which postulates that people who are deaf or hard of hearing have varying degrees of awareness of and identification with Deaf culture and the Deaf community (Glickman, 1993). The study addressed two questions. The first of these was: How do deaf and hard-of-hearing students describe the factors that influenced their college choice? The second question was: In what ways does a deaf or hard-of-hearing student's deaf identity influence the selection of a deaf-serving institution (DSI)?

Analysis of the data collected for this study revealed four themes that describe the study participants' college choice process: Secondary School Influences, Preparation for Career and Life, Accommodation for and Acceptance of Individuals who are Deaf or Hard of Hearing, and Searching for Kindred. The first theme, Secondary School Influences, describes how the study participants' college choice was influenced by experiences they had in high school that were unique to their status as deaf and hard-of-hearing students. These experiences included difficulties with support and access services, teachers and fellow students who were not familiar with deaf and hard-of-hearing students' needs, communication barriers, and feelings of isolation.

The second theme, Preparation for Career and Life, describes how the study participants' college choice was influenced by their desire to prove themselves and to attend a postsecondary institution that would provide opportunities for growth and development that would prepare them for a successful future as independent adults. The availability of desired programs of study, institutional reputation for providing a quality education, and opportunities to participate in cooperative education experiences all were factors that influenced study participants' college selection. Participants viewed these factors as being important in preparing them, as deaf and hard-of-hearing individuals, to compete in the world of work with their hearing peers.

The theme Accommodation for and Acceptance of Individuals who are Deaf or Hard of Hearing describes additional factors that study participants indicated were important to them in their college search and selection process. These included the quality of access and support services and whether the campus community would be willing to make necessary accommodations for them. The availability of on-campus

activities accessible to deaf and hard-of-hearing students also was a consideration. The fourth theme, Searching for Kindred, describes study participants' desire to attend an institution with a significant population of deaf and hard-of-hearing students where the participants would have the opportunity to associate with students whose identity characteristics and experiences would be similar to the participants' own.

The findings of the present study have implications for students and their families as well as high school teachers, counselors, and other professionals who work with deaf and hard-of-hearing students. The results also have implications for policymakers and Vocational Rehabilitation personnel as well as executive leaders at postsecondary institutions. The findings point to the importance of educational environments that can appropriately serve the needs of deaf and hard-of-hearing students. The results also point to a fundamental role in higher education for DSIs, which not only serve the educational needs of deaf and hard-of-hearing students, but also their social and cultural identity needs (Foster & Elliott, 1986). Further research is needed in order to better understand the college choice processes of this unique population, which will help inform development of policies and practices to assist deaf and hard-of-hearing students and their families in choosing colleges where the students can fit in, feel comfortable, pursue their dreams, and fulfill their potential.

## References

- American Indian Higher Education Consortium. (1999). *Tribal colleges: An introduction*. Retrieved from <http://www.aihec.org/documents/Research/intro.pdf>
- Anderson, J. D. (1988). *The education of blacks in the south, 1860-1935*. Chapel Hill: University of North Carolina Press.
- Andrews, J. F. (2006). Deaf culture values through children's fiction. *Multicultural Review*, 15(1), 25-36.
- Barnhart, J. S. (1991). *The transition process of hearing-impaired new sign language freshmen: An interview study of first semester experiences at Gallaudet University*. Retrieved from Dissertations & Theses: The Humanities and Social Sciences Collection. (9129331)
- Baum, S., Ma, J., & Payea, K. (2010). *Education pays 2010: The benefits of higher education for individuals and society*. College Board Advocacy & Policy Center. Retrieved from: [http://advocacy.collegeboard.org/sites/default/files/Education\\_Pays\\_2010.pdf](http://advocacy.collegeboard.org/sites/default/files/Education_Pays_2010.pdf)
- Bergerson, A. A. (2009). College choice and access to college: Moving policy, research, and practice to the 21<sup>st</sup> century. *ASHE Higher Education Report*, 35(4), 1-140.
- Braxton, J. M., Vesper, N., & Hossler, D. (1995). Expectations for college and student persistence. *Research in Higher Education*, 36(5), 595-612.
- Brooks, S., & Brooks, R. H. (1962). Handicapped students and the California two-year college. *Junior College Journal*, 33(1), 50-56.
- Brown, D. (2003). Tribal colleges: Playing a key role in the transition from secondary to postsecondary education for American Indian students. *Journal of American Indian Education*, 42(1), 36-45.
- Burleson, D. A. (2010). Sexual orientation and college choice: Considering campus climate. *About Campus*, 14(6), 9-14. doi: 10.1002/abc.20003
- Call, B. L. (1992). *Mainstreamed deaf college students' ratings of factors influencing postsecondary education choices* (Master's thesis). Retrieved from Dissertations & Theses: The Humanities and Social Sciences Collection. (1348656)

- Carnevale, A. P., & Desrochers, D. M. (2002). *The missing middle: Aligning education and the knowledge economy*. Office of Vocational and Adult Education, U.S. Department of Education. Retrieved from [www2.ed.gov/about/offices/list/ovae/pi/hs/carnevale.doc](http://www2.ed.gov/about/offices/list/ovae/pi/hs/carnevale.doc)
- Carty, B. (1994). The development of Deaf identity. In C. Erting, R. Johnson, D. Smith, & B. Snider (Eds.), *The deaf way: Perspectives from the International Conference on Deaf Culture* (pp. 40-43). Washington, DC: Gallaudet University Press.
- Cole, W. M. (2006). Accrediting culture: An analysis of tribal and historically black college curricula. *Sociology of Education*, 79(4), 355-388.
- Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches*. (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage.
- Dolinsky, A. L. (2010). The adequacy of the information that students utilize when choosing a college: An attribute importance and information sufficiency approach. *College Student Journal*, 44(3), 762-776.
- Engberg, M. E., & Wolniak, G. C. (2009). Navigating disparate pathways to college: Examining the conditional effects of race on enrollment decisions. *Teachers College Record*, 111(9), 2255-2279.
- Engberg, M. E., & Wolniak, G. C. (2010). Examining the effects of high school contexts on postsecondary enrollment. *Research in Higher Education*, 51(2), 132-153. doi: 10.1007/s11162-009-9150-y
- Foster, S., & Elliott, L. (1986). *Alternatives in mainstreaming: A "range of options" model for the postsecondary hearing-impaired student*. Rochester: Rochester Institute of Technology/National Technical Institute for the Deaf.
- Freeman, K. (1999). HBCs or PWIs? African American high school students' consideration of higher education institution types. *The Review of Higher Education*, 23(1), 91-106.
- Freeman, K. (2005). *African Americans and college choice: The influence of family and school*. Albany: State University of New York Press.
- Gallaudet University. (2011). *Gallaudet University Annual Report of Achievements*. Retrieved from [http://www.gallaudet.edu/Documents/Academic/121265\\_Gallaudet\\_Annual\\_Report\\_Web\\_2.pdf](http://www.gallaudet.edu/Documents/Academic/121265_Gallaudet_Annual_Report_Web_2.pdf)

- Gallaudet University. (n.d.). *History of Gallaudet University*. Retrieved from [http://www.gallaudet.edu/gallaudet\\_university/about\\_gallaudet/history.html](http://www.gallaudet.edu/gallaudet_university/about_gallaudet/history.html)
- Gasman, M., Lundy-Wagner, V., Ransom, T., & Bowman, N. (2010). Unearthing promise and potential: Our nation's historically black colleges and universities. *ASHE Higher Education Report*, 35(5), 1-134.
- Gilbreath, B., Kim, T., & Nichols, B. (2011). Person-environment fit and its effects on university students: A response surface methodology study. *Research in Higher Education*, 52(1), 47-62. doi: 10.1007/s11162-010-9182-3
- Gildersleeve, R. E. (2010). Access between and beyond borders. *Journal of College Admission*, 206, 3-10.
- Glesne, C. (1999). *Becoming qualitative researchers: An introduction*. New York, NY: Longman.
- Glickman, N. S. (1993). *Deaf identity development: Construction and validation of a theoretical model* (Doctoral dissertation). Retrieved from Dissertations & Theses: The Humanities and Social Sciences Collection. (9329612)
- Goldstein, T. L. (2001). *College choice and students who are deaf and hard of hearing: Understanding the process* (Doctoral dissertation). Retrieved from Dissertations & Theses: The Humanities and Social Sciences Collection. (9998980)
- Grossman, R., & Kegl, J. (2007). Moving faces: Categorization of dynamic facial expressions in American Sign Language by deaf and hearing participants. *Journal of Nonverbal Behavior*, 31(1), 23-38.
- Heath Resource Center. (n.d.). *Students who are deaf or hard of hearing in postsecondary education*. Retrieved from [http://www.angelo.edu/services/student\\_life/documents/StudentsWhoAreDeafinHigherEducation.pdf](http://www.angelo.edu/services/student_life/documents/StudentsWhoAreDeafinHigherEducation.pdf)
- Heilig, J. V., Reddick, R. J., Hamilton, C., & Dietz, L. (2011). Actuating equity: Historical and contemporary analyses of African American access to selective higher education from Sweatt to the top 10 percent law. *Harvard Journal of African American Public Policy*, 17, 11-27.
- Herren, C. D., Cartmell, D. D., & Robertson, J. T. (2011). Perceptions of influence on college choice by students enrolled in a college of agricultural sciences and natural resources. *NACTA Journal*, 55(3), 54-60.
- Hoag, R. L. (1989). *The origin and establishment of the National Technical Institute for the Deaf*. Rochester, NY: National Technical Institute for the Deaf.

- Hossler, D., & Gallagher, K. S. (1987). Studying student college choice: A three-phase model and the implications for policymakers. *College and University*, 62(3), 207-221.
- Humphries, T., & Humphries, J. (2011). Deaf in the time of the cochlea. *Journal of Deaf Studies and Deaf Education*, 16(2), 153-163. doi: 10.1093/deafed/enq054
- Hussar, W. J., & Bailey, T. M. (2011). *Projections of education statistics to 2019 (NCES 2011-017)*. National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://nces.ed.gov/pubs2011/2011017.pdf>
- Hycner, R. H. (1985). Some guidelines for the phenomenological analysis of interview data. *Human Studies*, 8, 279-303.
- Johnson, G. R., Jubenville, C., & Goss, B. (2009). Using institutional selection factors to develop recruiting profiles: Marketing small, private colleges and universities to prospective student athletes. *Journal of Marketing for Higher Education*, 19(1), 1-25.
- Joshi, P. V., Beck, K. A., & Nsiah, C. (2009). Student characteristics affecting the decision to enroll in a community college: Economic rationale and empirical evidence. *Community College Journal of Research and Practice*, 33(10), 805-822. doi: 10.1080/10668920802708843
- Karp, D. A., Holmstrom, L. L., & Cray, P. S. (1998). Leaving home for college: Expectations for selective reconstruction of self. *Symbolic Interaction*, 21(3), 253-276. doi: 10.1525/si.1998.21.3.253
- Kim, J., DesJardins, S., & McCall, B. (2009). Exploring the effects of student expectations about financial aid on postsecondary choice: A focus on income and racial/ethnic differences. *Research in Higher Education*, 50(8), 741-774. doi: 10.1007/s11162-009-9143-x
- Leigh, I. W. (2009). *A lens on deaf identities*. New York, NY: Oxford University Press.
- Li, X., & Carroll, C. D. (2007). Characteristics of minority-serving institutions and minority undergraduates enrolled in these institutions: Postsecondary education descriptive analysis report. National Center for Education Statistics. Retrieved from <http://nces.ed.gov/pubs2008/2008156.pdf>
- Lillis, M. P. (2008). High-tuition, high-loan financing: Economic segregation in postsecondary education. *Journal of Education Finance*, 34(1), 15-30.
- Mahan, G. H. (1974). Special provisions for handicapped students in colleges. *Exceptional Children*, 41(1), 51-53.

- Marshall, C., & Rossman, G. B. (2006). *Designing qualitative research* (4<sup>th</sup> ed.). Thousand Oaks, CA: Sage.
- Mattern, K., & Wyatt, J. N. (2009). Student choice of college: How far do students go for an education? *Journal of College Admission*, 203, 18-29.
- Maxwell-McCaw, D. L., Leigh, I. W., & Marcus, A. L. (2000). Social identity in deaf culture: a comparison of ideologies. *JADARA*, 33, 14-28.
- Maxwell-McCaw, D. L., & Zea, M. C. (2011). The Deaf acculturation scale: Development and validation of a 58-item measure. *Journal of Deaf Studies and Deaf Education*, 16(3), 325-342. doi:10.1093/deafed/enq061
- Mayerson, A. (1992). *The history of the ADA: A movement perspective*. Disability Rights Education and Defense Fund. Retrieved from [http://dredf.org/publications/ada\\_history.shtml](http://dredf.org/publications/ada_history.shtml)
- McPherson, J. M. (2008). A fair chance in the race of life: Thoughts on the 150<sup>th</sup> anniversary of the founding of the Columbia Institution. *Sign Language Studies*, 9(1), 33-44.
- Menchel, R. S. (1995). *Deaf students attending four-year colleges and universities* (Doctoral dissertation). Retrieved from Dissertations & Theses: The Humanities and Social Sciences Collection. (9534615)
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.
- Muhammad, C. G. (2006). [Review of the book *African Americans and college choice: The influence of family and school*, by K. Freeman]. *Review of Higher Education*, 29(2), 247-248.
- Muhammad, C. G. (2008). African American students and college choice: A consideration of the role of school counselors. *NASSP Bulletin*, 92(2), 81-94.
- National Association of the Deaf. (n.d.). Educating, advocating, and litigating. Retrieved from <http://www.nad.org/issues/about-law-and-advocacy-center>
- National Center for Education Statistics (NCES). (2011). *Fast facts: Enrollment*. Retrieved from <http://nces.ed.gov/fastfacts/display.asp?id=98>
- National Council on Disability. (2013, February 28). What will sequestration mean for people with disabilities? Retrieved from <http://www.ncd.gov/newsroom/022813>.
- National Technical Institute for the Deaf. (2011). *Annual Report of the National*

*Technical Institute for the Deaf*. Retrieved from  
[http://www.ntid.rit.edu/sites/default/files/annual\\_report\\_2011.pdf](http://www.ntid.rit.edu/sites/default/files/annual_report_2011.pdf)

- Newman, L., Wagner, M., Cameto, R., Knokey, A., and Shaver, D. (2010). *Comparisons across time of the outcomes of youth with disabilities up to 4 years after high school: A report of findings from the national longitudinal transition study (NLTS) and the national longitudinal transition study-2*. National Center for Special Education Research. Retrieved from  
[http://policyweb.sri.com/cehs/publications/nlts2\\_report\\_2010\\_09.pdf](http://policyweb.sri.com/cehs/publications/nlts2_report_2010_09.pdf)
- Nugent, T. J. (1978). More than ramps and braille. *American Education*, 14(7), 11-18.
- Obama, B. H. (2009). *Remarks by the president in state of union address*. The White House, Office of the Press Secretary. Retrieved from  
[http://www.whitehouse.gov/the\\_press\\_office/Remarks-of-President-Barack-Obama-Address-to-Joint-Session-of-Congress](http://www.whitehouse.gov/the_press_office/Remarks-of-President-Barack-Obama-Address-to-Joint-Session-of-Congress)
- O'Brien, E. M., & Zudak, C. (1998). Minority-serving institutions: An overview. *New Directions for Higher Education*, 102, 5-15.
- O'Connor, N. (2009). Hispanic origin, socio-economic status, and community college enrollment. *Journal of Higher Education*, 80(2), 121-145.
- O'Connor, N., Hammock, F. M., & Scott, M. A. (2010). Social capital, financial knowledge, and Hispanic student college choices. *Research in Higher Education*, 51(3), 195-219. doi: 10.1007/s11162-009-9153-8
- Ohna, S. E. (2004). Deaf in my own way: Identity, learning and narratives. *Deafness and Education International*, 6(1), 20-38.
- Padden, C. A., & Humphries, T. L. (2005). *Inside deaf culture*. Cambridge, MA: Harvard University Press.
- Palmer, R. T., Maramba, D. C., & Lee, J. M. (2010). Investigating Black students' disinclination to consider and attend historically Black colleges and universities (HBCUs). *NASAP Journal*, 13(1), 23-45.
- Paul, S. (2000). Students with disabilities in higher education: A review of the literature. *College Student Journal*, 34(2), 200-210.
- Pauline, J. S. (2010). Factors influencing college selection by NCAA Division I, II, and III lacrosse players. *Journal of Research in Health, Physical Education, Recreation, Sport & Dance*, 5(2), 62-69.
- Paulsen, M. B. (1990). College choice: Understanding student enrollment behavior.

*ASHE-ERIC Higher Education Report (No. 6)*. Washington, DC: School of Education and Human Development, The George Washington University.

- Pérez, P. A. (2010). College choice process of Latino undocumented students: Implications for recruitment and retention. *Journal of College Admission*, 206, 21-25.
- Perna, L. W. (2006). Studying college access and choice: A proposed conceptual model. In J. Smart (Ed.), *Higher Education: Handbook of theory and research* (Vol. XXI, pp. 99-157). Dordrecht, Netherlands: Springer.
- Perna, L. W., & Titus, M. A. (2004). Understanding differences in the choice of college attended: The role of state public policies. *The Review of Higher Education*, 27(4), 501-525.
- Powell, W. W., & Snellman, K. (2004). The knowledge economy. *Annual Review of Sociology*, 30(1), 199-220.
- Raines, R. T. (1998). Collaboration and cooperation among minority-serving institutions. *New Directions for Higher Education*, 102, 69-80.
- Raue, K., & Lewis, L. (2011, June). *Students with disabilities at degree-granting postsecondary institutions*. National Center for Education Statistics. Retrieved from [http://oeraccess.merlot.org/\\_media/documents/Students%20with%20Disabilities.pdf](http://oeraccess.merlot.org/_media/documents/Students%20with%20Disabilities.pdf)
- Reagan, T. (1995). A sociocultural understanding of deafness: American Sign Language and the culture of Deaf people. *International Journal of Intercultural Relations*, 19(2), 239-251.
- Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field Methods*, 15(1), 85-109. doi: 10.1177/1525822X02239569
- Seidel, J. V. (1998). *Qualitative data analysis*. Qualis Research. Retrieved from <http://www.scribd.com/doc/7129360/Seidel-1998-Qualitative-Data-Analysis>
- Shaw, S. F. (2009). Transition to postsecondary education. *Focus on Exceptional Children*, 42(2), 1-16.
- Smith, J. A. (2004). "College is a challenge, but I've got dreams and I know I can do it!": *Deaf students in mainstream colleges*. (Doctoral dissertation). Retrieved from Dissertations & Theses: The Humanities and Social Sciences Collection. (3149074)
- Staten, B. H., Staten, D., Hollis, A. C., Turner Whittaker, T. (2009). Diversity and

rehabilitation counseling: A historical perspective on the contributions of minority-serving institutions to the field of rehabilitation counseling. *Rehabilitation Education*, 23(2), 149-158.

Stearns, E., Potochnick, S., Moller, S., & Southworth, S. (2010). High school course-taking and post-secondary institutional selectivity. *Research in Higher Education*, 51(4), 366-395. doi: 10.1007/s11162-009-9161-8

Stinson, M. S., Scherer, M. J., & Walter, G. G. (1987). Factors affecting persistence of deaf college students. *Research in Higher Education*, 27(3), 244-258.

Stodden, R. A., Jones, M. A., & Chang, K. B. T. (2002). *Services, supports, and accommodations for individuals with disabilities: An analysis across secondary education, postsecondary education and employment*. Retrieved from [http://www.ncset.hawaii.edu/publications/pdf/services\\_supports.pdf](http://www.ncset.hawaii.edu/publications/pdf/services_supports.pdf)

Tevenal, S., & Villanueva, M. (2009). Are you getting the message? The effects of SimCom on the message received by deaf, hard of hearing, and hearing students. *Sign Language Studies*, 9(3), 266-286.

The College. (2011). *Annual Report of The College*. Retrieved from The College website.

The College. (2012). *The College 21 day enrollment report*.

The College. (n.d.). *Department of cultural and creative studies*. Retrieved from The College website.

The Princeton Review. (n.d.). *What's a good SAT score or ACT score?* Retrieved from <http://www.princetonreview.com/college/good-sat-score-act-score.aspx>

The University. (n.d.a.). *Center for campus life: Clubs & organizations*. Retrieved from The University website.

The University. (n.d.b.). *Overview of The University: At a glance*. Retrieved from The University website.

The University. (2012). *Prospectus 2012-2013*. Retrieved from The University website.

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125.

Tinto, V. (1986). Theories of student departure revisited. In J. Smart (Ed.), *Higher Education: Handbook of theory and research* (Vol. 2, pp. 359-384). New York, NY: Agathon Press.

Tobolowsky, B. F., Outcalt, C. L., & McDonough, P. M. (2005). The role of HBCUs in

the college choice process of African Americans in California. *The Journal of Negro Education*, 74(1), 63-75.

- Trostel, P. A. (2010). The fiscal impacts of college attainment. *Research in Higher Education*, 51(3), 220-247. doi: 10.1007/s11162-009-9156-5
- U.S. Department of Education. (n.d.). Building the legacy: IDEA 2004. Retrieved from <http://idea.ed.gov/explore/view/p/%2Croot%2Cstatute%2CI%2CD%2C662%2C%2C>
- U.S. Food and Drug Administration. (2010, September 8). What is a cochlear implant? Retrieved from <http://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/ImplantsandProsthetics/CochlearImplants/ucm062823.htm>
- U.S. Office of Management and Budget. (2013, March 1). OMB report to the Congress on the joint committee sequestration for fiscal year 2013. Retrieved from [http://www.whitehouse.gov/sites/default/files/omb/assets/legislative\\_reports/fy13ombjesequestrationreport.pdf](http://www.whitehouse.gov/sites/default/files/omb/assets/legislative_reports/fy13ombjesequestrationreport.pdf)
- Van Camp, D., Barden, J., Ren Sloan, L., & Clarke, R. P. (2009). Choosing an HBCU: An opportunity to pursue racial self-development. *The Journal of Negro Education*, 78(4), 457-468.
- Walter, G. G. (2010). *Deaf and hard-of-hearing students in transition: Demographics with an emphasis on STEM education*. Rochester: Rochester Institute of Technology/National Technical Institute for the Deaf.
- Walter, G. G., Clarcq, J. R., & Thompson, W. S. (2002). Effect of degree attainment on improving the economic status of individuals who are deaf. *JADARA*, 35(3), 30-46.
- Wolanin, T. R., & Steele, P. E. (2004). *Higher education opportunities for students with disabilities*. The Institute for Higher Education Policy. Retrieved from <http://www.ihep.org/assets/files/publications/m-r/OpportunitiesStudentsDisabilities.pdf>

## **Appendix A**

### **Flyer Invitation to Voluntarily Participate in the Study**

**You're invited. Get \$40 in gift cards to the [INSTITUTION NAME HERE] bookstore.**

**Attention deaf and hard-of-hearing first-year bachelor's degree students:**

**You are invited to participate in two short discussions about why you chose to enroll at [INSTITUTION NAME HERE]. If you participate, you will receive \$40 in gift cards to the [INSTITUTION NAME HERE] bookstore.**

**The discussions will take place on campus and each will last for 60 minutes.**



Greetings! My name is Pam Carmichael, and I am a doctoral student at St John Fisher College. As part of my doctoral program, I am conducting a research study to learn more about how deaf and hard-of-hearing students decide which college to attend.

Your participation is completely voluntary, and your identity will be kept confidential.

If you decide to participate, you will be invited to two one-on-one interviews/discussions with me, so that I can learn more about why and how you decided to attend [INSTITUTION NAME HERE].

You will receive a \$20 gift card to the [INSTITUTION NAME HERE] bookstore for each of the interviews/discussions, for a total of \$40 in gift cards, as my way of thanking you for your time.

The Institutional Review Boards of St. John Fisher College and [INSTITUTION NAME HERE] have reviewed and approved this study.

**If you would like to participate or you have any questions, please email me: [EMAIL ADDRESS HERE]. Thanks!**

Pamela L. Carmichael

**Note: This study is only for deaf and hard-of-hearing first-year bachelor's degree students, and space is limited.**

## **Appendix B**

### **Informed Consent Form**

**St. John Fisher College**  
Institutional Review Board

## Informed Consent Form

**Title of Study:** Factors Affecting Deaf and Hard-of-Hearing Students' Selection of a Deaf-Serving Institution: Deaf Identity Influences on College Choice

**Researcher's Name:** Pamela Carmichael

**Faculty Supervisor:** Dr. Jeannine Dingus-Eason

**Phone for Further Information:** [PHONE NUMBER HERE]

**Purpose of Study:** The purpose of the study is to learn more about how deaf and hard-of-hearing students describe the factors that influenced their college choice. The study also will examine the ways in which a deaf or hard-of-hearing student's deaf identity influences the selection of a deaf-serving postsecondary institution.

**Study Procedures:** Students will be invited to participate in two interviews with the researcher to discuss how they made their college choice. Students also will be asked to review [INSTITUTION NAME HERE] recruitment materials and identify what was most appealing to them as they were making their college selection.

**Approval of Study:** This study has been reviewed and approved by the St. John Fisher College Institutional Review Board (IRB) and the [INSTITUTION NAME HERE] Institutional Review Board.

**Place of Study:** [INSTITUTION NAME HERE]

**Length of Participation:** Two 60-minute individual interviews.

**Risks and Benefits:** The expected risks and benefits of participation in this study are explained below.

There are no expected risks of participating in this study.

The expected benefits are the opportunity to provide information that may help other deaf and hard-of-hearing students make decisions about college.

Students who participate in this study also will receive gift cards to the [INSTITUTION NAME HERE] bookstore.

**Method for Protecting Confidentiality/Privacy:**

To protect the study participants' privacy, their real names will not be used, and [INSTITUTION NAME HERE] will not be identified in the study.

**Your Rights:**

As a research participant, you have the right to:

1. Have the purpose of the study, and the expected risks and benefits fully explained to you before you choose to participate.
2. Withdraw from participation at any time without penalty.
3. Refuse to answer a particular question without penalty.
4. Be informed of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to you.
5. Be informed of the results of the study.

I have read the above, received a copy of this form, and I agree to participate in the above-named study.

\_\_\_\_\_  
Print name (Participant)  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print name (Investigator)  
Date

\_\_\_\_\_  
Signature

If you have any further questions regarding this study, please contact the researcher listed above. If you or your child experiences emotional or physical discomfort due to participation in this study, contact the St. John Fisher College Office of Academic Affairs at (585) 385-8034 or the [UNIVERSITY NAME HERE] Office of Academic Affairs at [PHONE NUMBER HERE] or the St. John Fisher College Wellness Center at (585) 385-8280 or the [UNIVERSITY NAME HERE] Student Health Center at [PHONE NUMBER HERE] for appropriate referrals.

**Appendix C**  
**Debriefing Form**

**St. John Fisher College**  
Institutional Review Board

**Debriefing Form**

**Title of Study:** Factors Affecting Deaf and Hard-of-Hearing Students' Selection of a Deaf-Serving Institution: Deaf Identity Influences on College Choice

**Name of Researcher:** Pamela Carmichael

**Address/Phone:** [ADDRESS AND PHONE NUMBER HERE]

**Faculty Supervisor/Phone:** Dr. Jeannine Dingus-Eason [PHONE NUMBER HERE]

**The Hypothesis of the Study:**

The purpose of the study is to learn more about how deaf and hard-of-hearing students describe the factors that influenced their college choice. The study also will examine the ways in which a deaf or hard-of-hearing student's deaf identity influences the selection of a deaf-serving postsecondary institution.

**Methods Used:** Students will be invited to participate in two interviews with the researcher to discuss how they made their college choice. Students also will be asked to review [INSTITUTION NAME HERE] recruitment materials and identify what was most appealing to them as they were making their college selection.

**Expected Results:** It is expected that the study will provide more information about how deaf and hard-of-hearing students decided to attend [INSTITUTION NAME HERE].

If you would like results of the study, please provide the following information:

**Name:**

**Address:**

**Phone:**

**Email Address:**

Thank you very much for your participation. Feel free to contact the researcher or the faculty supervisor listed above if you have any questions.

**Appendix D**  
**Background Information Form**

Pseudonym: \_\_\_\_\_

Email Address: \_\_\_\_\_

Major: \_\_\_\_\_

Hometown (city and state): \_\_\_\_\_

Sex (circle one): Male or Female      Age: \_\_\_\_\_

Race/Ethnicity (check one):

\_\_\_\_ Asian      \_\_\_\_ African American      \_\_\_\_ Caucasian

\_\_\_\_ Hispanic      \_\_\_\_ Native American      \_\_\_\_ Other

If none of these apply, please indicate your race/ethnicity:

\_\_\_\_\_

At what age did you become deaf or start to lose your hearing? (check one)

\_\_\_\_ Birth      \_\_\_\_ 1-2 years old      \_\_\_\_ 3-5 years old

\_\_\_\_ 6-10 years old      \_\_\_\_ 11-15 years old      \_\_\_\_ 16 years old or later

Which of the following describes your mother? (check one)

\_\_\_\_ Hearing      \_\_\_\_ Deaf      \_\_\_\_ Hard of hearing?

Which of the following describes your father? (check one)

\_\_\_\_ Hearing      \_\_\_\_ Deaf      \_\_\_\_ Hard of hearing?

How many siblings do you have, if any? \_\_\_\_\_

How many of your siblings, if any, are hearing? \_\_\_\_ Deaf? \_\_\_\_ Hard of hearing? \_\_\_\_

Which of the following describes the elementary school you attended? (check one)

\_\_\_\_ Mainstream      \_\_\_\_ Residential school for the deaf      \_\_\_\_ Self-contained classroom

If none of these apply, please describe the kind of elementary school you attended:

\_\_\_\_\_

Which of the following describes the high school you attended? (check one)

Mainstream     Residential school for the deaf     Self-contained classroom

If none of these apply, please describe the kind of high school you attended:

---

How do you prefer to communicate? (check one)

Spoken language     Sign language     Spoken and signed language together

If none of these apply, indicate how you prefer to communicate:

---

How do you describe yourself? (check one)

Deaf     Hard of hearing     Hearing    Other: \_\_\_\_\_

Are you familiar with Deaf Culture? (circle one)

Yes                  No                  Not Sure

Do you consider yourself a member of the culturally Deaf community? (circle one)

Yes                  No                  Not Sure

Are you willing to participate in a 60-minute individual follow-up interview in the next week or two to further discuss how you made your college choice? (Note: If you agree to participate in a follow-up interview, you will receive an additional \$20 gift card to the

[UNIVERSITY NAME HERE] bookstore.)

Yes, I am willing to participate in a follow-up interview.

No, I do not wish to participate in a follow-up interview.

**Appendix E**  
**Initial Interview Protocol**

- Tell me about the process you used, or the steps that you took, when you were searching for colleges?
  - Prompts: Printed materials, college websites, discussion with parents/family/teachers/counselors, campus visits
- When you were searching for a college, what things were important to you?
  - Prompts: Cost, distance from home, major, preparation for career/future, access/support services, social life, clubs/activities
- Often when students are searching for a college, they say that they are looking for a place where they feel like they will fit in. When you were searching for a college, what made you feel like you would fit in or not fit in at the colleges you were considering?
  - Prompts: Other deaf/hard-of-hearing students, hearing students, Deaf culture, activities
- Why did you decide to attend [The University]?
- Some students say that they chose to come to [The University] because they felt it would be a good place to learn more about themselves. How did your desire to learn more about yourself influence your decision to come to [The University]?
- Tell me about how you see yourself as a [deaf, hard-of-hearing] person and why you see yourself that way.
  - Prompts: Family influence, friend influence, experiences with hearing culture, experiences with Deaf culture
- Tell me how the way you see yourself as a [deaf, hard-of-hearing] person influenced your decision to enroll at [The University].
- Tell me about how your experiences in high school influenced your decision to attend [The University]?
  - Prompts: Friends, communication, access/support services, teachers
- Now that you're enrolled here, do you feel like you fit in at [The University]? Why or why not?
- Please share any final thoughts about why you choose [The University]

and/or what was important to you when you were searching for and considering colleges.

## **Appendix F**

### **Follow-Up Interview Protocol**

- How many colleges did you apply to?
- Tell me why you decided that it was important to attend a college that serves deaf and hard of hearing students.
- Why was it important to you to attend a college where other deaf and hard-of-hearing students are enrolled?
- Before you came to [The University], were your friends mostly deaf, mostly hard of hearing, mostly hearing, mostly hearing or a mix?
- Now that you're here at [The University], are your friends mostly deaf, mostly hard of hearing, mostly hearing or a mix?
- How was your decision to come to [The University] influenced by the types of friends you hoped you would have here?
  - Prompts: Were you hoping to have more friends who are deaf/hard of hearing/hearing than you had before? Why?
- Individual follow-up questions based on Interview #1.

**Document Reflection Activity:**

This is one of the brochures that we mailed to students who were considering attending [The University] at the time you were considering attending here. Please look through it and mark the parts that you found the most appealing to you when you were considering coming here for college.