Deaf Students In Collegiate Mainstream Programs

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THE RETENTION OF STUDENTS IN higher education is a major concern for students, parents, teachers, and college administrators. More than 40% of all college students leave without earning a degree. Of these, 75% drop out in the first two years of college (Tinto, 1987, 1993). These statistics are even more dire for students with hearing loss. There are approximately 468,000 Deaf and hard of hearing students currently attending college in the United States (Schroedel, Watson, and Ashmore, 2003); however, estimates for postsecondary students who are Deaf show that between two-thirds and three-quarters of those who begin their studies will never graduate (Myers and Taylor, 2000).

As colleges and universities strive to embrace diversity and provide all students an opportunity to succeed, important questions are raised: Why are Deaf students more likely to drop out than hearing students? What factors in the social and academic environment affect the adjustment process for students who are Deaf? These questions are the focus of this study.

It is important to begin with asking, what makes students in general either persist or withdraw from college? Researchers have found that persistence tends to be primarily a function of the quality of students' adjustment to the academic and social settings of an institution (Astin, 1993; Braxton, Vesper, and Hossler, 1995; Tinto, 1993). These researchers also found that students come to a particular institution with a range of background characteristics, as well as varying levels of commitment to acquiring a higher education. These characteristics include family

of origin relationships, and academic, social, and emotional readiness. Background characteristics, along with commitment, influence how students will adjust to the institution's social and academic settings.

Although we have statistics on the retention and academic success of college students who are Deaf, we know very little about the perspectives that Deaf college students hold regarding their academic and social experiences in small collegiate mainstream programs. Most research in this area has been conducted at postsecondary institutions which have supportive academic and social environments already in place for 100 or more Deaf students, such as Rochester Institute of Technology, California State University: Northridge, and Gallaudet University. Due to the larger number of students at these institutions, they are better prepared to accommodate Deaf students' social and academic needs than are colleges with a small number of Deaf students (Foster, 1999).

It is important to note, however, that more than 2,300 postsecondary institutions in the United States serve students who are Deaf or hard of hearing (Lewis, Farris, and Greene, 1994) and most of these institutions report fewer than 10 Deaf students. Although researchers have provided some data on college students' experiences at larger "Deaf-friendly" college settings, we know very little about the perception of social and academic success and satisfaction of Deaf college students who attend colleges where the number of Deaf students is substantially smaller.

PURPOSE OF THIS STUDY

Students who are Deaf report leaving their postsecondary institutions for many reasons, some of them similar to the reasons reported by their hearing peers. These include being too far from home, having financial problems, or being unsure of goals (Stinson, Scherer, and Walter, 1997). However, past research has shown that the most prominent reasons reported by Deaf students include college preparedness issues, such as weak academic skills and inadequate emotional readiness (e.g., separation from family and friends), as well as poor adjustment to the academic and social settings in their colleges. Deaf students report problems communicating with faculty, inadequate support services, and limited opportunities for social interactions with peers (Allen, 1994; Foster and Elliot, 1986).

An important goal of a college education is to obtain gainful employment. Historically, Deaf people have been underemployed (Schroedel, 1976; Welsh and Walter, 1988), although research over the past 15 years has found that a college education has made more and better jobs acces-

sible to Deaf people (Schroedel and Geyer, 2000). Although the number of Deaf students in postsecondary schools has increased over recent years (Myers and Taylor, 2000; Schroedel and Geyer), research has not kept up with the experiences of Deaf students in collegiate mainstream programs. Knowing and understanding their experiences can provide valuable information to a variety of professionals and programs that serve clients or students who are Deaf, such as vocational rehabilitation counselors, high school transition counselors, college and university faculty and staff, and career development, outreach, and support services programs.

This information may ultimately serve to reduce the attrition rate of students who are Deaf and subsequently increase gainful employment among this population. Further, analysis of trends among this population may help us understand attrition for other groups as well.

RESEARCH QUESTIONS

On the basis of findings from the existing literature, I posed two general research questions. First, how do students who are Deaf describe their experience in a mainstream college? Second, what factors in the social and academic environment are linked to Deaf college students' perceptions of academic and social success and satisfaction with life in a mainstream college? The first question allowed the participants to comment on the overall college experiences they find the most salient, whereas the second question narrowed the focus to the more specific area of the academic and social environment and how they relate to students' readiness for college, as well as feelings of academic and social success and satisfaction.

LITERATURE REVIEW

Persistence in College. Persistence in college has been a major concern for students, parents, teachers, and college administrators, and has been studied by researchers for several decades (Astin, 1993, 1999; Braxton et al., 1995; Chickering, 1969; Foster, 1988; Gerdes and Mallinckrodt, 2001: Pantages and Creedon, 1978; Tinto, 1987, 1993). Graduation rates for students in general average 43% for two-year colleges (within three years of initial enrollment) and 50% for four-year colleges (within five years of initial enrollment) (Tinto, 1993). Individual students bring personal characteristics into their environments that affect their persistence in higher education. Two areas have been identified as having an important influence on college attrition: a) academic adjustment and

integration, which includes academic abilities, motivational factors, and effective interactions with faculty in and outside the classroom; and, b) social and emotional adjustment and integration, which includes successful interpersonal relationships in the campus environment; feelings of self-worth; and issues pertaining to separation from family.

Researchers have found that personal integration into the social fabric of campus life plays a role at least as important as academic factors in student retention (Astin, 1993, 1999; Gerdes and Mallinckrodt, 2001; Youn, 1992). For instance, Astin (1999) found that environmental influences such as adequate support services and the opportunity to have social interaction with peers impact students' development and the amount of physical and psychological energy that students devote to college. His findings suggest that factors contributing to persistence also imply increased involvement, whereas factors contributing to departure from college imply limited involvement in the college experience. As pointed out, all students must deal with these factors. However, students with diverse backgrounds (e. g., cultural or ethnic minority students, or students who have disabilities) have additional struggles to overcome if they are to persist in college.

ACADEMIC, SOCIAL, AND EMOTIONAL ADJUSTMENT OF DIVERSE COLLEGE STUDENTS

The relationship between students and the college environment is seen as both reciprocal and dynamic (Bronfenbrenner, 1979, 1986; Dey and Hurtado, 1995). Tinto (1987, 1993, 1997) found that students are more likely to stay in college if the commitment and goal of college completion is reinforced by positive postsecondary experiences. This includes the college helping the student feel integrated within the institution. Negative postsecondary experiences tend to distance students from the social and academic communities of the institution and increase the likelihood that students will leave the institution and higher education altogether. Many students struggle to adjust to the academic and social environments of college, however, students from minority groups have additional hurdles to overcome.

Students of Color. Growing numbers of students from cultural and ethnic minority backgrounds are enrolling in college and most attend predominately White institutions (Ginter and Glauser; 1997; MacKay and Huh, 1994). At the same time, graduation rates for students of color at mostly White institutions have not increased in keeping with growing enrollments (Wilson, 1994). For example, Steele (1992) reported that more than two-thirds of African Americans leave predominately White campuses before graduation compared with less than 45% of White students (Tinto, 1987, 1993). Watson and Kuh (1996) found that adjusting to the social and academic environments seem to be central to the success of many students of color who attend predominately White institutions. They went on to report that the quality of students' relationship with peers, faculty, and administrators tend to be almost as important as individual effort to their achievement.

Other researchers, Eimers and Pike (1997) conducted a study to examine similarities and differences between minority and nonminority adjustment to college. These authors report three important findings from their study: 1) students of color had significantly lower levels of entering academic ability and subsequent achievement than nonminority students; 2) external encouragement such as support from parents was also found to be lower than among White students; and, 3) "...minority students had lower levels of academic and social integration, perceived quality, and institutional commitment than nonminority students" (p. 87). Eimers and Pike conclude that understanding adjustment differences between these two groups of students "can help campus administrators to develop retention programs that better reflect the unique and similar needs of minority and nonminority students" (p.95).

It is apparent that the academic and social environments of students of color impact their integration and adjustment to college life. Although Eimers and Pike's (1997) focus is on students from diverse cultural and ethnic background, their findings also coincide with results of research focused on retention and persistence of other minority students, i.e., those who have disabilities (Stodden and Dowrick, 2000; Thomas, 2000; Yuen and Shaughnessy, 2001).

Students with Disabilities. There are currently more students with disabilities in higher education than there ever have been (HEATH Resource Center, 1998). The HEATH Resource Center reports that 9% of all incoming freshman reported having a disability in 1998. This increase may be the result of informed choice on the part of disabled people. Only modest effort was made in accommodating college students with disabilities in the 1970s and the 1980s. The passage of Americans with Disabilities Act (ADA) in 1990, however, has contributed to students becoming increasingly more aware of their rights to accommodation while in higher education (Thomas, 2000).

An in-depth qualitative study of college students with disabilities by

Lehmann, Davies and Laurin (2000) resulted in four emergent themes: 1) students felt a lack of understanding and acceptance concerning disabilities on the part of fellow students, staff, faculty, and the general public; 2) students reported a lack of adequate services to assist them in tackling academic and nonacademic responsibilities; 3) there was a consensus that financial resources were insufficient, as well as knowledge regarding how to acquire resources to live a more self-sufficient life; and, 4) students stated that they had a lack of self-advocacy skills and training needed to live independently.

These findings support Tinto's (1987, 1993, 1997) assertion that positive postsecondary experiences in students' personal and academic environments (e.g., parental involvement and support, relationships between family, friends, and school, as well as students' feelings of academic, social, and emotional adjustment) significantly impact students' commitment to stay in college.

DEAF COLLEGE STUDENTS

Students who are Deaf are often included in discussions regarding college students with disabilities. However, students who are Deaf have their own unique struggles and challenges regarding their experiences in postsecondary education. Researchers (Schroedel, Watson, and Ashmore, 2003) estimate that during the year 2000, 468,000 Deaf or hard of hearing students were attending the nation's postsecondary institutions. This figure can be broken down to 345,000 who were hard of hearing, 115,000 who were deafened after the age of 18, and 8,000 who were deafened before the age of 18. What is a concern to many is that once these students arrived at college, most did not stay. Studies over the past few years (Rawlings, Karchmer, and DeCaro, 1991; NTID, 1997) indicate that, on average, only about 30% of Deaf students entering colleges across the country ultimately graduate. Even those institutions that are considered "Deaf-friendly," due to the high number of Deaf students in attendance, experience retention problems. At the National Technical Institute for the Deaf (NTID) for example, 50% of all entering students withdrew prior to graduation and almost 30% left prior to starting their second year of study (NTID).

These attrition rates are alarming for several reasons. Deaf people who enter the workforce without a college degree have a difficult time securing jobs in which they can compete and be successful (Welsh and MacLeod-Gallinger, 1992). Welsh and MacLeod-Gallinger found that Deaf works, in general, earn less than their hearing peers when level of

education is equal. In other words, a Deaf worker with less than a-bachelor's degree will earn 79% of what a hearing worker earns with the same degree. This gap closes with advanced degree levels. A Deaf worker with a bachelor's degree will earn 83% of what a hearing worker will earn, and 89% with a master's degree. In a more recent study, Schroedel and Geyer (2000) found that the level of college degree correlated positively with annual income among Deaf workers. They further confirmed that Deaf college graduates earned significantly less than hearing graduates at the same degree levels. Succeeding in and graduating from college is essential if Deaf individuals hope to compete and succeed in the world of work.

In recent years, studies have examined higher education attrition and persistence rates for students who are Deaf (Myers and Taylor, 2000; Stinson and Walter, 1997). One researcher in particular, Sue Foster (Foster, Long, and Snell, 1999; Foster and Walter, 1992; Foster and DeCaro, 1991: Brown and Foster, 1991; Foster, 1988), has dedicated almost two decades to understanding the mainstreamed Deaf college student; however, the majority of her research has been with students who attend the National Technical Institute for the Deaf (NTID), which is housed at Rochester Institute of Technology. In fact, most research on mainstream college students who are Deaf occurs at NTID. This is not representative of the mainstream experience in general, however, because there are over 400 Deaf students in attendance at this institution (NTID, 1997).

There has been limited research regarding Deaf students who attend mainstream postsecondary institutions with a significantly smaller number of Deaf students. What are their experiences? And, what factors relate to their persistence or withdrawal from college? Evidence points out that retention of students who are Deaf is rather dismal. Data collected in the early 1990s (Rawlings, Karchmer, DeCaro, and Allen, 1991) looked at 112 programs that serve Deaf students. This study found that two-year institutions with programs for supporting Deaf students admitted on average 12 to 14 new students each year, and graduated, on average, only three students each year, for a withdrawal rate of about 75%. This rate was repeated at the four-year colleges. These institutions admitted, on average, four freshman each year and graduated only one student.

An earlier study by Foster and Elliot (1986) found that lack of effective communication could determine academic difficulties and consequently student withdrawal. Their research concluded that even when interpreters were assigned to the classroom and additional support systems were in place, Deaf students complained that teachers moved through the class lecture too quickly and seemed to treat Deaf students as if they could

hear. The result was students often left class feeling confused about the lecture and unsure of assignments. A later study by Franklin (1988) suggested that four factors had a significant relationship with persistence or withdrawal of Deaf students. The students who stayed in school were generally those who:
  1) had better oral communication skills;
  2) attended high schools that provided minimum support;
  3) experienced some kind of pre-college preparation; and,
  4) declared a major during the first year of college.

English (1993) had similar findings when she evaluated a model of persistence using Deaf students who attended mainstream postsecondary institutions. She found that students who reported greater interaction with faculty did better academically. English also found that those students with higher grades expressed intent to remain in college until graduation.

These studies point to the importance of the immediate and intermediate environments of the Deaf college student. Relationships with classmates, faculty, and other college staff have been shown to make a significant impact on students' retention in postsecondary education. Although the number of Deaf students who attend postsecondary institutions across the country has increased (Lewes et al., 1994), there have been few follow-up studies to examine the experience of mainstream college students who attend smaller Deaf programs.

METHODOLOGY

The purpose of this study was to gain more understanding of how college students who are Deaf explain their perceptions of academic and social success and satisfaction in a mainstream postsecondary setting. Due to the dearth of literature in this field, this study was viewed as exploratory. The research questions and goals, as well as the lack of literature on the topic, pointed to the use of qualitative research methodology for this study. This method allowed an in-depth and naturalistic look at the topic to be studied. Lofland and Lofland (1995) state that naturalistic research "involves a close and searching description of the mundane details of everyday life. (p. 7).

The use of qualitative methods is a viable approach to research with college students who are Deaf (Foster, 1996; Mertens, 1998; Sheridan, 1996). This approach allows the uniqueness of each Deaf participant to emerge while identifying themes common to groups of college students who are Deaf in the contexts of their mainstream college environments. One of

the benefits of using qualitative methods with a diverse group such as college students who are Deaf, is that it requires ongoing self-examination and reflection on the realities, values, and worldviews of the researcher, as well as the participants (Mertens).

A semi-structured interview approach was used. I developed a specific interview protocol, but participants were also able to determine the course of the discussion. Each interview took about two hours and was videotaped. The interviews were conducted at the student's university in a private taping room. The interviewees used a variety of communication modes, from ASL, to PSE, to spoken English. Each interview was transcribed verbatim into written English. Also, because ASL is not my first language, a Deaf language consultant was hired to randomly review approximately 20 minutes per transcribed session to make sure the interpretation was accurate.

PARTICIPANT CHARACTERISTICS

For this study, 14 mainstream undergraduate college students who are Deaf and have completed at least one term of college at the institution where they are interviewed were selected. Participation included nine females and five males who were undergraduate students, not living with their family of origin, and not married. Students were identified from four universities in the Pacific Northwest.

Since this study focused on Deaf college students, the students had to identify themselves as being *Deaf* versus *hard of hearing* or *hearing impaired*. Individuals who identify as *hard of hearing* or *hearing impaired* often identify first as being "hearing" and second as having a hearing loss. Although Deaf and hard of hearing students are often considered together for studies, hard of hearing college students face challenges that are quite different than those of students who are Deaf. Therefore for the purpose of this study, selected students self-identified as being Deaf and received support services from their college's Office of Disability Services.

The participants were between the ages of 18 and 23. Three of these students had just completed their first fall term as a college student. Of the students interviewed, six had transferred to their current university from other colleges. Two of the participants previously attended California State University at Northridge (CSUN), two attended community colleges, one student had attended a state college as well as Galluadet University, and one had gone to Gallaudet University, a community college, and then the current university.

Most all of the students interviewed graduated from mainstream

high schools. In fact, only one graduated from a residential school for the Deaf. Eight of the participants had been the only Deaf student in their high school. And six had classmates who were also Deaf. However, many of these students said that the other Deaf student in the high school often were in Deaf programs versus being in the mainstream program.

The average high school GPA for the participants was 3.58 for these students. Those grades ranged from a GPA of 2.6 to 3.93. Many of these students were extremely high achievers in their high schools. Once in college, the average GPA was 2.90, with ranges from 2.32 to 3.69. The average GPA from the four universities involved in this study is 2.95 so it seems that the Deaf students are holding their own. Again, it is important to point out that three of the students interviewed had just completed their first term in college. Research shows that during the first one to two years, students' GPA usually is lower when they are focused on their core required classes versus their major classes (Astin, 1993).

The participants reported a variety of academic majors and career goals. Four of the students are majoring in health or physical education. Two of the students are majoring in education. Two of the students are majoring in social work or psychology and the rest of the students are majoring in biology, anthropology, art and design, horticulture, and urban planning. Two of the students were still undecided about their major. The career goals were also quite varied. Participants had goals to become athletic recruiters or working in the health field. Two want to specifically teach other Deaf children. Two want to work with Deaf people and their families as counselors. One wants to become a medical doctor. Another student sees herself as becoming a museum curator. One wants to design video games and another a superintendent at a golf course or a landscape designer. One even has his sites set on becoming a city planner or manager.

RESULTS

After the interviews were transcribed and the characteristics of the students compiled, the analysis of the data began. Due to limited time, this section will focus only on preliminary findings. Four distinct categories emerged regarding these students: 1) the students talked about their identity and how they communicated in the world; 2) their family of origin and their relationship with each family member was also an important category; 3) the stories the students had regarding their readiness for college, or how well their high schools prepared them for college; and 4) their personal perceptions about what made them feel successful and

satisfied both academically and socially at their college. Direct quotes from the interviewees are included.

Identity. In regards to identity, most students quickly said, "I am Deaf." It was interesting to hear that several of the students had been diagnosed as hard of hearing first and then later as Deaf. Many of these mainstream students had experiences both as a hard-of-hearing student and as a Deaf student. A female 22-year-old student said, "I used to be hard of hearing, but then I became Deaf. I have always felt like I was between two worlds."

Students also talked about cochlear implants (CI). Two of the students said they had an CI in early childhood. Only one of the students is currently using their CI. Three of the students said they might be interested in have a CI sometime in the future. All three said that they were too busy now to do all the training required with a new CI. Nine of the participants stated they were not interested in having a CI. Of those nine, most said they were very comfortable with who they were and saw no need for having a CI.

Communication preference was also included in the identity category. Eight of the students were comfortable using either ASL and voice or PSE and voice. Many of the students had oral training in their mainstream schools. One student did not sign at all and communicated only orally and through writing.

Family of Origin. The literature that focuses on college retention points to the importance of family support (Astin, 1993, 1999; Braxton et al., 1995). Most of the participants in this study stated that they received encouragement and support from their family members. There were a number of interesting characteristics regarding the students' family of origin. First, exactly half are first-generation college students: 50% of the students' parents did not attend college. It was interesting to note that eight out of the 14 students' parents learned sign language at the time of their child was diagnosed as Deaf; in other words, eight students began communicating effectively with their parents at an early age. Over time, five of the sets of parents have continued to sign with their child. Six sets of parents never learned sign language and have always communicated orally with their Deaf child.

The students had a variety of comments related to their families. The following quotes indicate how often the students contacted their parents' while they were in college, the changes that have taken place since they left for college, their feelings of closeness to their parents, and the importance of their parents' support:

Mostly I talk to my mom on IM [internet-based instant messenger]. It is so easy. We don't have to go through the relay. We talk once, twice, sometimes, three times a week. We talk about what we are doing. My parents live in another state so I don't get to see them very often. (male, age 21)

I am the closest to my dad because we are both Deaf. We have had similar experiences. He has always been there for me. (female, age 18)

I am the only Deaf member in three generations. But my family can sign, so ASL is their second language…but I am exposed to sign language everyday (at school) and my family is a little behind in knowing the signs. So when I go home, they are sometimes confused and awkward with my new signs. (female, age 21)

College Readiness. As stated earlier, one of the areas the students focused on was their high school preparation. Preparation for college during high school is related to college retention (Gerdes and Mallinckrodt, 2001). Students in this study were asked if the perceptions they had in high school about college was found to be accurate once they arrived at college. Most of the students said they were totally overwhelmed with the amount of independence they were allowed. And many did not feel prepared for how much to study. As you can see by the following quotes, some students felt more prepared than others:

My high school prepared me for college. I took all college level preparation courses…my teachers really encouraged me to be ready for college. (female, age 18)

I was a high achiever in high school. I have always been a very motivated student…Nobody told me I needed to get good grades to get into college. I just did it…I want to add that a support system is imperative…I believe the people you surround yourself with will really affect you. The world is an equal playing field. If you have the right people around you, you will be fine. (male, age 21)

I was totally overwhelmed my first year. I almost dropped out. I was so frustrated! I tried to communicate in class, but I didn't understand them and they didn't understand me…In high school every thing was there for me. If I needed help I could find it easily. (female, age 22)

ACADEMIC AND SOCIAL SUCCESS AND SATISFACTION

Academic Success and Satisfaction. There are several factors that have been found to affect the academic success and satisfaction of college students. Those include interpreters, notetakers, the amount of class participation, the relationship students have with faculty members, and the students English writing skills (English, 1993). Most students were

satisfied with their interpreters. However, some students talked about their frustration with interpreters and talked about how reliant they were on the skill of their interpreter.. If the interpreter was not skilled in voicing, then the students stated that they sat back and did not participate. Voicing skills of the interpreters were one of the biggest complaints for these students and caused internal conflict for some:

I wish interpreters were available 24/7. I don't like having to schedule 2 days in advance. (male, age 21)

I feel like many interpreters don't understand that I am from a different background. I sign more English or toal communication. I feel like the interpreters expect me to fit their way of signing. (female, age 22)

I don't trust the interpreters will voice correctly for me. Most of the time their weakest skills is voicing. I get embarrassed that if the interpreter can't voice what I am saying, then the students in the class will think I am dumb. (female, age 20)

I am very participatory with Deaf people. I can stand up and talk about what is on my mind. With hearing people it is different. Partly because of the interpreters. I am afraid they won't understand what I am signing. I have to repeat and repeat…Sometimes I feel like I have two personalities. (female, age 20)

Students also talked about the importance of notetakers. All students said they needed to have both interpreters and notetakers to succeed in school, however, several students had complaints about their notetakers. The strongest recommendation was to have more professionally trained notetakers:

Some of the notetakers are really sloppy. They really need to work harder on their writing because it isn't always clear. And sometimes the notes don't make sense. (female, age 18)

Notetakers are really important and I want them available for each class. The quality of notetaking can influence my grades. I sometimes have a hard time with notetakers. (male, age 20)

Class participation and relationship with faculty has been shown to be an important part of a student's success in college (English, 1993). Students in this study said they definitely felt more comfortable in small classes or when there are small discussion groups. But most of the students stated that they often hesitated to participate in class.

One student had attended a mainstream high school and a community college where she was the only Deaf student. She transferred to her current college where there was a larger group of Deaf students. Being

with other Deaf students greatly impacted her identity and confidence:

> I am participating more in classes because I have become more comfortable being Deaf. I have met so many Deaf people (since high school) and have watched how they handle things. Now I am more confident to join in. (female, age 20)

The relationship with faculty has also been shown to be important to feelings of success and satisfaction (English, 1993). Most of the students felt that technology has opened up the possibility of communication between them and their teachers:

> I email my teachers if I have any questions from class. That is the best way to communicate with them. It helps so much if teachers check and respond to their emails. (female, age 18)

> Teachers are more helpful than I thought they would be. They have worked with Deaf students before so they know how to relate to me. (male, age 18)

English writing skills also impact academic satisfaction and success (English, 1993). Out of the 14 participants, eight felt that their writing skills were equal to their hearing classmates. Six felt that their writing skills were weaker. All participants stated that they enjoyed reading, although mostly for pleasure versus assigned homework or text reading. Many of the students utilized the tutoring or writing centers at their universities. The biggest concern students had regarding the tutoring center, was making sure that either the tutor was Deaf and signed or there was a qualified interpreter was available to work with them and the tutor.

Social Success and Satisfaction. As stated earlier, the social satisfaction of college has an equally strong affect on a students' retention in college (Gerdes and Mallinckrodt, 2001). Most of the interviewees had been mainstreamed and used to socializing with other hearing students. Some said they were too busy to socialize or were more comfortable staying by themselves.

However, the vast majority of students considered themselves social people and wanted to be with others. Students at one smaller university where there was an interpreter training program and many ASL classes were thrilled with the number of hearing students who knew sign language. Most of the students stated that they are the most comfortable socializing with people who were Deaf or who could sign:

> I really love being around people and socializing. I hate being alone. I

will hang out with hearing or Deaf people. I use my voice with hearing and I sign with Deaf people. It is not big deal. (male, age 23)

> I tend to hang out with my Deaf friends everyday. I also hang out with my hearing friends who know sign language, but not everyday. I like to be with different groups of students. Sometimes I use IM with hearing people who don't know sign language and that is fine, too. (female, age 18)

Dating is an important part of the social experience in college. Most of the students said they were still "playing the field." But some had some very specific ideas about dating:

> I would like to date, but I am not dating right now. It just hasn't been the right situation or the right person. Or even enough time. (female, age 21)

> I would prefer to marry a Deaf man, or at least someone who can sign. Because I want good communication. I want to teach my children how to sign so they can communication with me. I don't want to feel alone again. I don't want to feel not a part of my family. But for dating, I really don't care if the hearing guy doesn't sign. If he is the right guy for me, then he will learn sign language. (female, age 22)

Feeling a part of the campus community has a strong link to a student's sense of social success and satisfaction (English, 1993; Foster and Elliot, 1986). All 14 of the students interviewed for this study were involved in extra-curricular activities at their university. Many had been involved in high school sports and continued that into college. These Deaf college students were involved in football, basketball, lacrosse, scuba diving, and intramural sports. Students were also members of fraternities or sororities, as well as being resident assistants. Students talked about being active in numerous college committees and clubs. A favorite activity for students at one university was the ASL club, which included both Deaf and hearing students, and had recently won an award for being the most active club on that particular campus.

Most students said they felt satisfied at their colleges. However, when I asked them what ideas they had to improve that satisfaction, they came up with many ideas. Most said that there should be more in-service training for both students and faculty to explain Deaf culture and Deaf students' experiences. Almost all said that there needs to be more Deaf students on campus and equal accessibility to activities:

> I would be happier if there were more Deaf students at my college. (female, age 20)

> I would like to see more activities accessible to Deaf students and Deaf students more involved. I think it is important to involve Deaf students in

classroom activities. Sometimes I think the faculty overlook Deaf students and don't even see that we exist. (male, age 21)

All faculty should know the role of the interpreter and how to use the interpreter appropriately. There are still most teachers who look directly at the interpreter when they should be looking at me, or they tell the interpreter "tell her"...things like that. (female, age 21)

DISCUSSION

The literature regarding experiences of Deaf students in collegiate mainstream programs is very limited. It is clear, however, that approximately 70% of these students will not complete their college degree (Myers and Taylor, 2000). The research that has been conducted in this area has mainly focused on mainstream institutions that enroll a large number of Deaf students, such as NTID (approximately 400 students).

We know very little about college students who attend postsecondary institutions with much smaller Deaf programs. Success in college has a significant impact on future employment. Research has found that obtaining a college degree positively correlates with annual income among Deaf employees (Schroedel and Geyer, 2000). Succeeding in and graduating from college is essential if Deaf individuals hope to compete and succeed in the world of work. Positive academic and social experiences in college promote persistence for college students who are Deaf (English, 1993; Foster and Elliot, 1986).

The purpose of this qualitative study was to learn more about the experience of students who attend universities with small Deaf populations. Fourteen Deaf college students enrolled in mainstream college programs were interviewed. Students discussed their perceptions of academic and social success and satisfaction with their academic experiences. A follow-up study will be conducted in four years to see where these 14 students are academically and career-wise. This study also provides implications for future studies.

What about Deaf students in mainstream college programs who are not traditional? What is their college experience like? (The students for this study were all of traditional college ages for undergraduates.) Also, what about hard-of-hearing students? How well does school actually prepare these students for college? The students interviewed for this study said that they do not plan to drop out of college, however, the statistics say that they might. Although this was a small study and only preliminary findings are presented, I believe this research will contribute to the literature in this field and provide more information regarding college success

for Deaf students, their families, vocational rehabilitation counselors, university staff, and others. I also hope this study will open the doors for more research into what can help Deaf students persist in college and so that the majority of Deaf college students can obtain their degree.

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