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Barriers to Accommodation Use for Students with Disabilities
in Postsecondary Education

Michael James Lyman

A dissertation submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy

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ABSTRACT

Barriers to Accommodation Use for Students with Disabilities in Postsecondary Education

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Doctor of Philosophy

Students with disabilities at the postsecondary level face a number of different barriers to accommodation use. Past research has shown that students with disabilities that use accommodations obtain greater academic achievement and higher graduation rates. Limited research has been conducted to identify barriers to accommodation use, and the research that has been conducted has not sampled a population that was specifically identified as having faced barriers to accommodation use. By interviewing students with disabilities, who had been identified as having faced barriers, this study identified seven themes. Four of the identified themes were considered complex as they contained sub-themes, while the other three themes were more straightforward and contained no sub-themes. The four complex themes were Desire for Self-Sufficiency, Desire to Avoid Negative Social Reactions, Insufficient Knowledge, and Quality and Usefulness of DSS and Accommodations. The three straightforward themes were Negative Experiences with Professors, Fear of Future Ramifications, and Accommodations are Not Needed. It is hoped that the findings of this study help both disability support service providers and students with disabilities in making better and more informed decisions regarding barriers to accommodation use.

Keywords: students with disabilities, college students, accommodations, disability support services, barriers.

TABLE OF CONTENTS

Introduction.....	1
Statement of Problem.....	4
Statement of Purpose	5
Review of Literature	6
Disability Legislation.....	7
The Rehabilitation Act of 1973.....	8
Child and adolescent disability legislation.	9
The Americans with Disabilities Act of 1990.....	9
Postsecondary Services for Students with Disabilities.....	10
Current State of Students with Disabilities.....	12
Studies of Accommodation Effectiveness	12
Experimental designs.....	13
Quasi-experimental designs	14
Self-report survey designs.....	15
Summary of research	17
Barriers to Accommodation Use.....	18
Current Study	22
Method	24
Participants.....	25
Procedures.....	26
Data Collection	27
Data Analysis	28
Assumptions of the Researcher.....	29

Results.....	31
Theme #1: Desire for Self-Sufficiency.....	31
Importance of being independent.....	31
Being self-accommodating.....	33
Using accommodations as a backup.....	35
Theme #2: Desire to Avoid Negative Social Reactions.....	37
Not wanting to be viewed or treated differently.....	37
Fear of suspicion from others for receiving special treatment.....	41
Not wanting to be a burden.....	43
Theme #3: Insufficient Knowledge.....	45
Question of fairness of accommodations.....	45
Lack of awareness of DSS or available accommodations.....	47
Question of being disabled enough.....	49
Theme #4: Quality and Usefulness of DSS and Accommodations.....	51
Process of requesting and receiving accommodations.....	51
Certain accommodations are not available.....	53
Accommodations are not effective or helpful.....	55
Theme #5: Negative Experiences with Professors.....	57
Theme #6: Fear of Future Ramifications.....	59
Theme #7: Accommodations are Not Needed.....	61
Discussion.....	64
Summary of Findings and Contribution to the Research.....	64
Implications.....	67
Study Limitations.....	70

Future Research 72

References..... 74

APPENDIX A..... 83

APPENDIX B..... 84

Introduction

It has been well documented that postsecondary education increases earning potential over the course of an individual's life (Day & Newburger, 2002); this holds true for individuals with disabilities. Individuals with disabilities are employed at greater rates (Hennessey, Roessler, Cook, Unger, & Rumrill, 2006) and earn comparable wages to their peers without disabilities when they have a college education (Walters, 2000). Sadly, compared to students without disabilities, students with disabilities (SWD) enroll in college at half the rate (Dowrick, Anderson, & Acosta, 2005) and obtain a college degree at lower rates (Houtenville, 2003; National Center for Education Statistics, 1996). These low enrollment and graduation rates partly explain why individuals with disabilities often have lower economic success. Individuals with disabilities are often underemployed and paid low wages (Hughes & Avoke, 2010). In addition, 26% of individuals with disabilities live below the poverty level, while only 9% of individuals without disabilities fall below the poverty level (National Organization on Disability, 2004).

Thankfully the number of individuals with disabilities in postsecondary institutions is increasing (Horn, Peter, & Rooney, 2002). The National Center for Education Statistics (2006) estimates that 11.3% of postsecondary students are SWD. This percentage is much higher than in 1978 when only 2.6% of postsecondary students were SWD (Henderson, 1999). This marked increase in college attendance is significant and can be in part traced to a few key pieces of legislation that have been passed in support of individuals with disabilities (Yell, Rogers, & Rogers, 1998).

In 1973, Section 504 of the Rehabilitation Act was passed which was the first piece of legislation that specifically provided protection for individuals with disabilities. This legislation states that any institution that receives federal financial funds must provide equal access for

individuals with physical or mental impairment (Rehabilitation Act of 1973). Providing equal access can be thought of as removing barriers to use of facilities and services that the institution provides. This act applied to many postsecondary institutions, since many received federal funds, but it did not specifically mention postsecondary institutions. Another shortcoming of the Rehabilitation Act was that it didn't provide civil or criminal penalties for colleges that didn't comply, making it less effective than it could have been (Yell et al., 1998). The Americans with Disabilities Act (ADA) of 1990 corrected some of these shortcomings. The ADA specifically stated that it applied to postsecondary institutions, and provided penalties for noncompliance. The Rehabilitation Act (1973) and the ADA (1990) have played a large part in providing access to postsecondary education for SWD (Cope, 2005; Zuriff, 1996).

At the postsecondary level, a large portion of the responsibility to comply with the mandates of disability legislation has been carried by disability support services (DSS) (Szymanski, Hewitt, Watson, & Swett, 1999). Stodden (2001) reports that the majority of postsecondary institutions within the United States have DSS. Once SWD have disclosed and provided documentation of their disability, a disability service professional, in cooperation with the student, will consider the provision of services on a case by case basis (Frank & Wade 1993) according to the functional limitations of the student (Ofiesh, 2007). Accommodations are used as DSS's primary method of providing services to SWD (Baker, 2006). The term accommodation can be defined as "the provision of any educational support that is needed for the person with a disability to access, learn, and benefit from educational services alongside college peers without disability" (Upton, 2000, p. 10).

Even with disability legislation and accommodations provided by DSS, SWD are still graduating at lower rates than their peers without disabilities. These disappointing graduation rates for SWD have in part led researchers to question the effectiveness of DSS and the

accommodations that they provide (Mull, Sitlington, & Alpers, 2001). Researchers have approached accommodation effectiveness in a number of different ways. The available experimental (Alster, 1997; Zuriff, 2000), quasi-experimental (Keim, McWhirter, & Bernstein, 1996; Vogel & Adelman, 1990), and self-report survey studies (Berry & Mellard, 2002; Sharpe, Johnson, Izzo, & Murray, 2005) suggest that accommodations are beneficial to SWD. Salzer, Wick, and Rogers (2008) came to a similar conclusion from their review of the literature; “students with disabilities are as academically successful as students without disabilities when person-specific supports are provided” (p. 371).

Even though the literature suggests that DSS and the accommodations they provide are beneficial to SWD and boost graduation rates (Salzer et al., 2008; Vogel & Adelman, 1990), there is evidence that these services aren't being fully utilized. In a national survey of community colleges Barnett and Li (1997) found that only about half of SWD were actually using available accommodations. In addition, the National Longitudinal Transition Study-2 found that only 40% of postsecondary SWD had informed their schools of their disability (a necessary requirement to receive services) and only 35% of all SWD received accommodations (Wagner, Newman, Cameto, Garza, & Levine, 2005).

The fact that at least half of SWD aren't using DSS and accommodations suggests that there might be barriers to use. Barriers can be thought of as factors that prevent SWD from seeking out or making regular use of the accommodations available to them (Marshak, Van Wieren, Ferrell, Swiss, & Dugan, 2010). Research regarding barriers to accommodation use is limited. What research is available has identified the following barriers: feelings of social disconnection, discriminatory attitudes of other students and faculty, the sometimes subpar practices of DSS, ineffective accommodations, unavailable accommodations, accommodations that reduce independence, a possible lack of help seeking behaviors, stigma attached to

disabilities, and insufficient knowledge among SWD concerning their disability (Dowrick et al., 2005; Kurth & Mellard, 2006; Marshak et al., 2010; Trammell & Hathaway, 2007; West, Kregel, Getzel, & Zhu, 1993). Many of these studies didn't directly study barriers, but included barriers as just a small part of their broader study. Also, many of the studies used methods such as surveys that did not allow the participants to fully explain or elaborate on their experiences. Marshak et al.'s (2010) study did use a methodology (semi-structured interviews) that allowed the participants to explain and elaborate on their experiences with barriers, but the research design contained a large limitation. The study makes no mention of whether the participating students had actually encountered barriers to seeking or utilizing accommodations. While most SWD have faced barriers, not all report facing barriers to postsecondary education (West et al., 1993). The data for Marshak et al.'s (2010) study was part of a larger body of data that examined more general issues related to SWD. Thus it makes sense that the participants would include all SWD. A more ideal population to study barriers to seeking or utilizing accommodations would be SWD who have definitely encountered such barriers.

Statement of Problem

Even though the literature suggests that DSS and the accommodations they provide are beneficial to SWD and boost graduation rates, there is evidence that these services aren't being fully utilized. There has been research concerning barriers to use of accommodations, but the literature is limited and has limitations. One of the primary limitations is that most of the studies utilized a methodology (i.e., surveys) that did not allow for the participants to explain and elaborate on their experiences with barriers to accommodation use. While Marshak et al.'s (2010) qualitative study did use a methodology (semi-structured interviews) that allowed the participants to explain and elaborate on their experiences, the participants were not specifically screened to determine whether they had actually faced barriers to accommodation use or not.

Statement of Purpose

The purpose of the current study was to examine barriers to accommodation use by interviewing students that have specifically been identified as having faced barriers to accommodation use.

Review of Literature

Individuals with disabilities make up a considerable proportion of the population in the United States. Of the 291.1 million people in the U.S. in 2005, 54.4 million had some level of disability (Brault, 2008). This translates to roughly 19% of the U.S. population meeting criteria for a disability (U.S. Census Bureau, 2000). This makes individuals with disabilities the largest minority group in the U.S. (Olkin, 2002).

Minority groups often have lower economic success (Dalaker, 2001); this also holds true for individuals with disabilities. According to the National Organization on Disability (2004) 35% of individuals with disabilities are employed full or part time, while 78% individuals without disabilities work full or part time. Other studies also report this large discrepancy in employment rates (Brault, 2008; Gerber, 1997). In addition, those individuals with disabilities that are employed are often underemployed and paid low wages (Hughes & Avoke, 2010). This combination of high unemployment rates and low wages can result in poverty for many individuals with disabilities. Twenty-six percent of individuals with disabilities live below the poverty level, while only 9% of individuals without disabilities fall below the poverty level (National Organization on Disability, 2004). In addition to receiving lower wages, individuals with disabilities often have additional costs associated with having a disability (e.g., home health aide, ongoing therapy, accessible transportation) (Hughes & Avoke, 2010). These sad findings explain in part the overall lower life satisfaction rates for individuals with disabilities (National Organization on Disability, 2004).

One area that may decrease this economic gap between individuals with and without disabilities is the attainment of postsecondary education. Hennessey et al. (2006) reported that individuals with disabilities are three to five times more likely to be employed when they have a college education. Other research supports these findings that the rate of employment

significantly increases for individuals with disabilities when they have a college education (Gilmore & Bose, 2005). In addition, it has been well documented that postsecondary education increases earning potential over the course of an individual's life. Over the course of one's adult work life, individuals that have graduated from high school can expect to earn \$1.2 million, while those with bachelor's degrees can expect to earn almost twice as much at \$2.1 million (Day & Newburger, 2002). This increase in wages also holds true for individuals with disabilities that obtain postsecondary education. According to Walters (2000), individuals with disabilities that obtain a bachelor's degree earn comparable wages to their peers without disabilities, which essentially erases the economic disparity between the two groups. By obtaining postsecondary education, individuals with disabilities are employed at greater rates, receive higher wages, and ultimately report greater quality of life (National Council on Disability, 2003).

Thankfully the number of individuals with disabilities in postsecondary institutions is increasing (Horn et al., 2002). The National Center for Education Statistics (2006) estimates that 11.3% of postsecondary students are students with disabilities (SWD). This percentage is much higher than in 1978 when only 2.6% of postsecondary students were SWD (Henderson, 1999). This marked increase in college attendance is significant and can be in part traced to a few key pieces of legislation that have been passed in support of individuals with disabilities (Yell et al., 1998). These pieces of legislation highlight protections and opportunities provided to SWD, as well as the ways in which disability was and is now defined.

Disability Legislation

Prior to 1973, the only law that provided direct protection against discrimination of individuals with disabilities was the Fourteenth Amendment (Thomas, 2000). The Fourteenth Amendment is a general law that requires states to provide equal protection for citizens and

cannot discriminate or show preferential treatment to groups of individuals. However this law didn't include specific protection for individuals with disabilities, as had previously been provided for race, gender, and other forms of discrimination (Thomas, 2000).

The Rehabilitation Act of 1973. In 1973, Section 504 of the Rehabilitation Act was passed which was the first piece of legislation that specifically provided protection for individuals with disabilities. This legislation states that any institution that receives federal financial funds must provide equal access for individuals with physical or mental impairment (Rehabilitation Act of 1973). Providing equal access can be thought of as removing barriers to use of facilities and services that the institution provides. Since many postsecondary institutions received federal funds, this act applied directly to many postsecondary or potential postsecondary SWD. Also, it is of note that if any part of the institution received federal funding the entire institution needed to fully comply with the Rehabilitation Act (Joshi, 2006; Thomas, 2000).

In addition to providing protection for individuals with disabilities, this piece of legislation indirectly gave a definition of disability. The document stated that it provided benefits and services for “any person who has a physical or mental impairment which substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment” (Rehabilitation Act of 1973). Prior to the Rehabilitation Act there was no general definition of disability as defined by the law (Yell et al. 1998).

The Rehabilitation Act (1973) was a step towards more access and opportunities for SWD to attend and succeed at college, but it didn't provide civil or criminal penalties for colleges that didn't comply. Since there were no penalties or incentives the Rehabilitation Act wasn't as effective as it could have been at compelling postsecondary institutions to provide equal access for SWD (Yell et al. 1998).

Another important idea contained within the Rehabilitation Act (1973) was that of an individual being otherwise qualified. The act stated that no individual that is otherwise qualified cannot be discriminated against or excluded solely because of disability. SWD are considered otherwise qualified if they are able to meet the academic standards of the institution when provided with equal access (Scott, 1991).

Child and adolescent disability legislation. For decades the Rehabilitation Act (1973) was the only major legislation that dealt with disabilities at the postsecondary level. But during this time there was important legislation being passed for children and adolescent SWD. Two of the major pieces of legislation for children and adolescents were the Education for All Handicapped Children Act (1975) and the Individuals with Disabilities Education Act (1990). Both of these acts built upon and expanded prior disability legislation for children and adolescents regarding education, but neither dealt with postsecondary SWD. It wasn't until 1990 and the Americans with Disabilities Act (ADA) that major new legislation was introduced for postsecondary SWD.

The Americans with Disabilities Act of 1990. The ADA of 1990 required that necessary accommodations be provided to all individuals with disabilities. This included postsecondary SWD. The exact language of the ADA is that accommodations must be provided to permit individuals with disabilities “to perform essential functions of the employment position” (ADA, 1990). This is the language that has been used to point to the now universal use of accommodations in both the work and postsecondary settings. There is also another important aspect of the ADA which states that individuals with disabilities must be qualified for the position and be able to perform the needed functions either with or without accommodations (ADA, 1990). This mirrors the otherwise qualified stipulation in the Rehabilitation Act (1973).

The ADA, as does the Rehabilitation Act of 1973 before it, provided a definition of disability. It defines disability in three parts and is similar to the definition provided in the Rehabilitation Act (1973). The first is that a disability is a physical or mental impairment which impairs or limits one or more major life activities and limits it in a substantial way. The second is that the individual must have some sort of record of the impairment/disability. The third is that if the individual does not have a record of their disability, they must be regarded as having a disability or impairment (Yell, et al., 1998).

The ADA (1990) and the Rehabilitation Act (1973), along with the accommodations that have resulted from legislation, have often been referred to as creating an “equal playing field” (Cope, 2005; Zuriff, 1996). The idea behind the “equal playing field” is that nonessential barriers to postsecondary education should be eliminated either through modification or accommodations (Zuriff, 1996).

Postsecondary Services for Students with Disabilities

At the postsecondary level, a large portion of the responsibility to provide an equal playing field and comply with the mandates of disability legislation has been carried by disability support services (DSS) (Szymanski et al., 1999). Postsecondary DSS have been available for many decades, but there has been rapid growth in the number of DSS due largely to the passage of disability legislation (Dukes & Shaw, 1998). Stodden (2001) reports that of the 3,000 postsecondary institutions within the United States a majority of those institutions offer educational assistance to SWD through DSS.

While the exact policies and procedures of DSS vary by institution (Stodden, 2001), they often follow similar policies and procedures (Duffy & Gugerty, 2005, Reilly & Davis, 2005). One such policy is that in postsecondary education it is the responsibility of the student to seek out DSS, provide documentation of disability, and request needed services (Hadley, 2007). Once

documentation of the disability is provided, a disability service professional, in cooperation with the student, will consider the provision of services on a case by case basis (Frank & Wade 1993). The disability service professional's decision of which, if any, services should be provided for the student is based on the functional limitations of the student's disability (Ofiesh, 2007).

DSS have utilized accommodations as one of the primary methods for providing services to SWD (Baker, 2006). The term accommodation in the context of education can be defined as “the provision of any educational support that is needed for the person with a disability to access, learn, and benefit from educational services alongside college peers without disability” (Upton, 2000, p. 10). According to Stodden, Jones, and Chang (2002) “accommodation” is also the language that the ADA (1990) uses in describing services for SWD in postsecondary institutions. For the current study, the term accommodation will be used to denote all services and supports provided by DSS.

There are many different types of accommodations that are used at the postsecondary level. Some reasonable accommodations listed by the ADA (1990) include: making facilities accessible, acquisition or modification of equipment and devices, provisions for interpreters, modifications or adjustments to examinations, etc. These accommodations listed by the ADA are broad in nature and do not specifically list all the accommodations that are being or should be provided. Sharpe et al. (2005) reported that recent postsecondary graduates with disabilities endorsed the following as the most frequently used instructional accommodations: 1. extended-time, 2. using a quiet environment, 3. communicating with the instructor, and 4. using the assistance of a tutor. Graduates also reported the most frequently used assistive technology accommodations as: 1. use of scanners, 2. talking books, 3. note taking devices, and 4. text help software (Sharpe et al., 2005). While this study (Sharpe et al., 2005) illustrates some of the most commonly used accommodations, Alghazo (2008) provides a much more extensive list that

demonstrates the large amount of different accommodations provided in postsecondary education.

Current State of Students with Disabilities

Although disability legislation and accommodations provided by DSS have helped in increasing the number of SWD in postsecondary education (Yell et al., 1998), there is still room for improvement. Individuals with disabilities are underrepresented when compared to K-12 student and general populations (Kurth & Mellard, 2006). Compared with students without disabilities, SWD enroll in postsecondary education at half the rate (Dowrick et al., 2005).

In addition to SWD enrolling in postsecondary education at lower rates, research also shows that SWD graduate at lower rates than their peers without disabilities. According to a study by the National Center for Education Statistics (1996) 53% of SWD completed either their degree or vocational certificate as compared to 64% of students without disabilities. These lower retention rates are supported by statistics that show that 30% of individuals without disabilities obtain a college degree as compared with 13% for individuals with disabilities (Houtenville, 2003). Since college education significantly increases an individual's employability and wages (National Council on Disability, 2003), these low graduation rates put individuals with disabilities at an educational and ultimately economic disadvantage.

Studies of Accommodation Effectiveness

Disappointing enrollment and graduation rates for SWD have in part led researchers to question the effectiveness of DSS and the accommodations that they provide (Mull, Sitlington, & Alper, 2001). Also, disability legislation mandates that accommodations and services be effective (Duffy & Gugerty, 2005). The available research on effectiveness of accommodations is limited (Black, Smith, Harding, & Stodden 2002; Stodden, 2001; Thompson, Blount, and Thurlow, 2002), and much of it is focused on learning disabilities (LD) as well as elementary and

secondary student populations. The available research for accommodation effectiveness for postsecondary SWD will be reviewed below. The research will be categorized according to experimental, quasi-experimental, and self-report survey research designs.

Experimental designs. Zuriff (2000) reviewed five experimental studies dealing with the accommodation of extended-time for postsecondary students with LD. All of the five research studies tested students with LD under both standard timed conditions and under extended-timed conditions. While results from the five studies varied between the different tests and subtests, Zuriff (2000) stated that the overall results showed that students with learning disabilities improved significantly under the extended-time condition. These findings suggest that the provision of extended-time can be effective for students with LD.

Alster (1997) also conducted an experimental study which examined the accommodation of extended-time for postsecondary students with LD. Forty-four students without LD were matched with 44 students with LD on several factors such as age gender, ethnicity, language background, and math achievement. Both students with and without LD took a college algebra test under timed and extended-time conditions. Results showed that students with LD scored significantly lower than the students without LD under the timed condition. But the extended-time scores of the students with LD did not significantly differ from the time or extended-time scores of students without LD, suggesting the effectiveness of extended-time accommodations for students with LD.

These two experimental studies by Zuriff (2000) and Alster (1997) both share similar limitations. One such limitation is that both of the studies only included students with LD and thus should not be generalized to all SWD. In addition the studies used only one type of accommodation, and used it with every participant. This practice adheres to the standards of experimental designs (which requires random assignment and manipulation of the independent

variable) but these are not the circumstances under which accommodations are usually provided in postsecondary education. Often students are provided with more than one accommodation at a time and are provided on a case by case basis (according to functional limitations) (Frank & Wade, 1993), instead of a blanket accommodation for all students. But even without the ideal circumstance of accommodations being provided on a case by case basis, the results still showed that students with LD benefitted from extended-time.

Quasi-experimental designs. Another way of studying the effectiveness of accommodations is to utilize a quasi-experimental design using measures such as GPA and graduation rates. While this type of research design might be criticized as not being a true experimental design (Aussems, Boomsma, & Snijders, 2011), it seems to be a good fit for studying accommodation effectiveness. As discussed earlier a true experimental design requires random assignment and manipulation of the independent variable (Aussems et al., 2011). This does not allow students to be given accommodations in a natural case by case basis (Frank & Wade 1993) based upon their specific functional limitations (Kurth & Mellard, 2006). Quasi-experimental research allows for accommodation effectiveness to be studied in a more real-world setting based on the case by case functional limitations of SWD.

A study by Keim et al. (1996) utilized a quasi-experimental design to explore the impact of accommodation use on GPA for students with LD. The researchers tracked how many times the students used accommodations and then used analysis of covariance to examine the impact on GPA. In addition “the data were covaried on the student’s first semester GPA in an attempt to control for variation due to gradations of academic strength among the students” (p. 505). Keim et al. (1996) concluded that “in general, the results of this study confirmed the effectiveness of university support programs for students with learning disabilities” (p. 506). In particular, contact with advisement and use of a designated computer lab (located within DSS

and offered trained lab assistants) were related to higher cumulative GPA. The overall findings of the study showed that for students with LD, the use of accommodations was related to higher cumulative GPA.

Vogel and Adelman (1990) also conducted a quasi-experimental in which they looked at graduation rates of students with LD. The participants included 110 students with LD that were compared with a random stratified sample of 153 students without LD attending the same college. The students with LD were matched with the random stratified sample on gender, college experience, and when they entered college. The students with LD were receiving supports and accommodations through DSS. The results of the study showed that with the use of accommodations students with LD graduated at the same rate and within the same time frame as students without LD. Vogel and Adelman (1990) concluded that the “findings seem to indicate that the support services available to the enrolled LD students were effective in helping LD students overcome the effects of the learning disability and complete their degree at the same rate as their nondisabled peers” (p. 340).

While both of these quasi-experimental studies (Keim et al., 1996; Vogel & Adelman, 1990) only included the students with LD, the results are still valuable and encouraging. Their studies suggest that the use of accommodations may lead to higher cumulative GPA and increased graduation rates.

Self-report survey designs. Another way that researchers have studied the effectiveness of accommodations is by having SWD self-report how satisfied they are with their accommodations through the use of surveys. Outside of two studies by Sharpe et al. (2005) and Berry and Mellard (2002) there is limited research on the subject using self-report surveys. The research that does exist is mainly non-peer reviewed studies consisting of dissertations. Two dissertations report general satisfaction with provided accommodations (Brown, 2007;

Reinshmiadt, 2008) while another reports mixed findings (SWD expressed low satisfaction at three universities and high satisfaction at one university) (Dutta, 2001).

Sharpe et al. (2005) used self-report surveys to examine satisfaction of accommodation use of SWD. Participants included 169 individuals with disabilities that had all graduated from a postsecondary institution. Thirty-three percent of participants indicated learning disability as their primary disability, 23% reported ADHD, and about 27% of all participants selected more than one disability area. When asked to indicate satisfaction with instructional accommodations and services received, 69% of participants endorsed “very satisfied” and only 7% indicated either “somewhat dissatisfied” or “very dissatisfied”. Participants were slightly less satisfied with the assistive technology support they obtained with 53% of participants endorsing “very satisfied” and only 6% endorsing either “somewhat dissatisfied” or “very dissatisfied.” Results also showed that 35% of participants felt they were denied an instructional accommodation they thought was needed, while 17% of participants felt they were not provided with a specific type of assistive technology they thought was necessary for them (Sharpe et al., 2005). One limitation of this study is that the researchers only included college graduates in their study. This limits useful information that could be obtained from the experiences of SWD who did not graduate or are still in school. Also, accommodations were lumped all together when participants were asked how satisfied they were with accommodations. This forces the participants to answer for accommodations as a whole and doesn’t allow for the possibility of the participant being satisfied with some accommodations but not with others.

Berry and Mellard (2002) also utilized self-report surveys to assess SWD’s satisfaction of accommodations. Twenty-eight SWD participated. The participants self-identified as having a variety of disabilities including “learning disabilities, emotional/behavioral, mental health disorder, orthopedic/mobility, deaf/hard of hearing, blind/visually impaired, chronic illnesses,

and speech/language disorders” (Berry & Mellard, 2002, p. 2). Results showed that 88% of the participants reported that they either agreed or strongly agreed that they were satisfied with the accommodations they were provided. Similarly to the Sharpe et al. (2005) study, accommodations were all lumped together, not allowing participants to report satisfaction for individual accommodations.

The results of the studies by Sharpe et al. (2005), Berry and Mellard (2002), and available dissertations (Brown, 2007; Dutta, 2001; Reinshmidt, 2008) suggest that SWD are generally satisfied with their accommodations. While self-reported satisfaction isn't the exact same thing as effectiveness, it does provide useful information. Self-reported satisfaction is commonly used as an outcome measure for evaluating the impact of particular life circumstances (Hensel, 2001). These self-report studies suggest that students who are using accommodations are generally satisfied with those accommodations.

Summary of research. The available experimental, quasi-experimental, and self-report survey studies suggest that accommodations are beneficial to SWD. Other researchers have come to similar conclusions in their reviews of the literature. In referencing previous studies (Keimig, 1984; Palmer & Roessler, 2000; Platt, 1998; Trammell, 2003) Trammell and Hathaway (2007) state that “there is ample evidence that taking advantage of such interventions does result in academic improvement for many individual students” (p. 5). Salzer et al. (2008) also conclude that “students with disabilities are as academically successful as students without disabilities when person-specific supports are provided” (p. 371).

Even though the literature suggests that DSS and the accommodations they provide are beneficial to SWD and boost graduation rates (Salzer et al., 2008; Vogel & Adelman, 1990), there is evidence that these services aren't being fully utilized. In a national survey of community colleges Barnett and Li (1997) found that only about half of SWD were actually

using available accommodations. In addition, the National Longitudinal Transition Study-2 found that only 40% of postsecondary SWD had informed their schools of their disability (a necessary requirement to receive services) and only 35% of all SWD received accommodations (Wagner et al., 2005).

Barriers to Accommodation Use

The fact that at least half of SWD aren't using DSS and accommodations suggests that there might be barriers to use. Barriers can be thought of as factors that prevent SWD from seeking out or making regular use of the accommodations available to them (Marshak et al., 2010). Researchers have explored these barriers through surveys, focus groups, quasi-experiments, and qualitative semi-structured interviews.

A study by West et al. (1993) surveyed SWD, and as part of the study the students were asked about the general barriers they had encountered in postsecondary education. While this study looked at general barriers to education for SWD, many of the results touched on and are applicable to accommodation related barriers. The participants consisted of 761 SWD from 43 institutions in Virginia. Findings indicated that 86% of the participants had encountered barriers in their education. The reported barriers fell into four main categories. The first category included service and accommodation barriers that were disability specific (e.g. limited availability of tutors or lack of ramps into facilities). The second category included barriers that were not disability specific (e.g. lack of understanding and cooperation from faculty and other personnel). The third category included barriers regarding a lack of information for SWD (e.g. being unaware of services). The fourth and final category included social and emotional barriers (e.g. feeling isolated and ostracized by other students or faculty). A major limitation of this study stemmed from the inherent limits of using a survey methodology. Using a survey allowed the researchers to reach many SWD, but limited the richness of information that might have been

obtained. The survey format did not allow the researchers to ask any follow up questions about barriers that the students had faced, thus limiting further depth and breadth of information.

Dowrick et al. (2005) used focus groups to study barriers that SWD face in obtaining and utilizing accommodations. Ten focus groups were conducted at different postsecondary sites across the country. Focus groups lasted one to two hours, and included between three and 19 participants per group. The results of the focus groups “indicated that students with disabilities still have difficulty obtaining basic accommodations and supports” (p. 41). Three main barriers were identified by the focus groups. The first barrier pertained to discriminatory attitudes and assumptions from other students and faculty. This included being questioned about their abilities as well as not being accommodated by professors. The second barrier was a lack of social support from family and peers. It was mentioned that sometimes overprotective parents would discourage SWD from pursuing postsecondary goals. SWD also reported that it was more difficult to meet and make friends. The third barrier involved the sometimes subpar practices of DSS. While participants often mentioned *individual* counselors or staff who provided great support and guidance, DSS as a whole were sometimes seen as lacking in advertising of services, funding, and coordination with other departments on campus. A limitation of this study concerns the way in which the data was analyzed. The researchers of this study (Dowrick et al., 2005) did not conduct the focus groups, but instead had individuals at the various institutions conduct the focus groups and then analyzed the resulting transcripts. This practice made sense logistically, but placed limits on the analysis process. According to Kvale and Brinkmann (2009) analysis should be a process that occurs both during the interview or focus group session as well as post transcription. By limiting the analysis strictly to post transcription, the participants were not allowed to react and help shape the analysis during the focus groups.

A study by Kurth and Mellard (2006) utilized a survey research design. The participants consisted of 108 SWD registered with DSS. As part of their study they asked SWD what factors were most important in their decision to use a particular accommodation or not. Results showed that the three most important factors were the effectiveness of the accommodation, the availability of the accommodation, and the degree to which the accommodation increased independence. Conversely, the findings suggest that when accommodations are not viewed as effective, available, or as increasing independence then students are less likely to use them. These findings also suggest that SWD are evaluating and taking many factors into consideration when making decisions about utilizing accommodations or not. As mentioned with the West et al. (1993) study, the use of surveys by Kurth and Mellard (2006) did not allow follow up questions and thus limited further information that might have been obtained.

Trammell and Hathaway (2007) conducted quasi-experimental research in which they tracked the help-seeking behaviors of SWD. This research was conducted to see whether SWD are less likely to seek out help than students without disabilities. Twenty professors participated in the study. The professors tracked the number of times students visited their offices for help. A total of 413 visits were made by 185 different students. Of those 185 students, 19 or 10.3% were students with self-disclosed disabilities. The analysis showed no statistical differences between SWD and students without disabilities in the rates that they sought help from professors. There was also no statistical difference between the amount of visits for SWD and students without disabilities. Although this study found no differences in help-seeking behavior between SWD and students without disabilities, Trammell and Hathaway (2007) point out that their study “did not answer the larger question of whether or not students with disabilities are seeking *enough* help” (p. 11, italics in original). The researchers go on to suggest that future qualitative

research “might provide particularly meaningful insights” (p. 11) in studying help-seeking behavior as a possible barrier to seeking out accommodations for SWD.

Marshak et al.’s 2010 study is the most recent to examine barriers that prevent SWD from seeking out and using accommodations. “The information gathered for this study was part of a larger body of data obtained from semi-structured...interviews” (p. 153). Qualitative semi-structured interviews seem to be a good fit for the research as it allows in-depth descriptions of the SWD’s experiences with barriers to accommodations. Participants included 16 SWD that were registered with the school’s DSS. The researchers grouped the data into five main themes. The first theme dealt with identity issues for SWD. These identity issues included a desire to shed the stigma of high school identity to not integrate the presence of a disability into their identity, and to be self-sufficient. The second category involved SWD’s desire to avoid negative social reactions. This included a fear of resentment from other students for receiving special treatment as well as not wanting to be singled out. The third category involved insufficient knowledge among SWD. This insufficient knowledge dealt with questions of fairness of receiving accommodations, confusion about services provided by DSS, and a lack of training in how to explain their disability to others. The fourth category dealt with SWD’s perceptions of the quality and usefulness of services. This included questions about expediency, quality, and fit of accommodations. The fifth and final category included negative experiences that SWD had with professors. The authors noted that the “majority of the barriers that inhibited the use of accommodations and services were internal ones” (Marshak et al., 2010, p. 160).

Although this study by Marshak et al. (2010) provides important and useful information, there are limitations to the study. One such limitation is the low response rate of the participants. A total of 327 students were contacted, with only 16 ultimately participating in the study. While 16 participants is not troubling for a study using semi-structured interviews, the low response

rate (4.9%) may be of more concern. While a low response may not be a problem in and of itself, it may indicate a lack of representativeness (Cook, Heath, & Thompson, 2000), or in other words, there may be fundamental differences between those that participated and those that did not. The larger limitation of the study by Marshak et al. (2010) concerns the population that was chosen for participation. The study makes no mention of whether the participating students had actually encountered barriers to seeking or utilizing accommodations. While many SWD have faced barriers, not all report facing barriers to postsecondary education (West et al., 1993). Since the data for this study was part of a larger body of data that examined more general issues related to SWD, it makes sense that the participants would be SWD that simply were registered with DSS. A more ideal population to study barriers to seeking or utilizing accommodations would be SWD who have definitely encountered such barriers.

The literature shows that there is a group of students that are approved for accommodations, but that subsequently do not utilize them. Dunlop (2002) reports of SWD that were assessed by DSS, approved for accommodations, and then did not return for the resources and accommodations that were available to them. Lindstrom (2007) states that "...some students disclose their disability to their school, but then eschew use of any accommodations" (p. 230). Marshak et al. (2010) also mentions this group of students stating that many students do not make regular use of the accommodations for which they have been approved. Not using accommodations after being approved for them suggests that there are barriers that are preventing SWD from using these accommodations.

Current Study

The current study utilized this population of SWD (those that are approved for accommodations and subsequently do not use them) to explore barriers that prevent students from seeking out and using accommodations. There is previous research regarding barriers that

SWD face, but the literature is both limited and has limitations. The current study built upon past research, especially Marshak et al.'s 2010 study, while contributing new perspectives and information through interviewing a population that hasn't been previously studied. It is hoped that the information obtained through this study will be of help to both SWD and DSS providers in making more informed decisions regarding barriers to accommodation use.

Method

This study employed a qualitative research strategy that is based on semi-structured interviews of participants. This strategy addressed the research question by understanding participants' ideas, views, perceptions, reactions, attitudes, opinions, thoughts, and experiences (Jensen, 2006). Denzin and Lincoln (1994) stated, "Qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them" (p. 3).

Qualitative research is ideal for studying people and experiences as they naturally occur (Johnson & Christensen, 2008). The current study investigated the naturally occurring experiences of SWD regarding their barriers to access in college. The study utilized semi-structured interviews that were analyzed using a hermeneutic circle as informed by Kvale and Brinkmann (2009). The philosophical foundation of this study was relational ontology (Schwandt, 2000). A relational ontology assumes that relationships are primary and necessary in understanding human experience (Jackson, Smith, & Hill, 2003). The epistemology of this study was that of hermeneutic and dialectic (Denzin & Lincoln, 2000). An important tenet of this epistemology is that "understanding is something that is *produced* in [that] dialogue, not something *reproduced* by an interpreter through an analysis" (Schwandt, 2000, p. 195, italics in original). In keeping with these philosophical foundations this study utilized the following approach suggested by Kvale and Brinkmann (2009):

1. The interview focuses on the everyday "life world" of the interviewee.
2. The interviewer attempts to understand and interpret the meaning of the themes in the interviews.
3. The interview is aimed at obtaining knowledge qualitatively.

4. The interviewer encourages specific nuanced descriptions of the interviewees' life worlds.
5. The interviewer encourages the interviewees to describe specific situations and sequences instead of general opinions.
6. The interviewer demonstrates openness towards new and unexpected knowledge.
7. The interview is focused on general themes instead of strict standardized questions and structure.
8. The interviewer is aware that statements can sometimes be ambiguous, reflecting contradictions in the world that the interviewee lives in.
9. The interview is an evolving process in which the interviewee may come to new insights and change their descriptions and meanings about a theme.
10. The interviewer is sensitive and knowledgeable about the interview topic.
11. The interview is an interpersonal interaction through which knowledge and meaning is produced.
12. The interview has the potential of being a rare and enriching experience for the interviewee. (Adapted from Kvale & Brinkmann, 2009, pp. 28-32).

Participants

Sixteen interviews were conducted for this study. The participants were SWD that had registered with disability support services (DSS) at a large, private, religious university. Their age range was 20 to 43 years, with a mean of 25.7 years. Nine were male and seven were female. Participants were each paid \$40 as compensation for their time and participation. Participants were identified through a list at DSS that identified students that have been approved for accommodations but did not pick up their accommodation letters during the 2010-2011 school year. A total of 42 students were identified and contacted by email. Participants' self-

reported disability types included depression, anxiety, severe mental health disorders, Post-Traumatic Stress Disorder (PTSD), learning disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Asperger's syndrome, neurological disability, back injury, type 1 diabetes, endocrine disease, autoimmune disease, and visual impairment.

Kvale and Brinkmann (2009) suggest that the researcher should “interview as many subjects as necessary to find out what you need to know” (p. 113). The common qualitative interview design tends to utilize around 15 interviews plus or minus 10 (Kvale & Brinkmann, 2009). Lastly, Kvale and Brinkmann (2009) warn against the commonly misunderstood presupposition that “the more interviews, the more scientific” (p. 113). The current study followed these guidelines in determining an appropriate number of participants. At around 10 to 12 interviews, the primary researcher noticed that the data being gathered seemed to be redundant. A few more interviews were conducted, for a total of 16, to make sure that a point of saturation and redundancy had been reached.

All participants met the following criteria. Each student had been enrolled in at least one semester or term during the 2010-2011 school year. Also during the 2010-2011 school year, all students had been approved for one or more accommodations, and had not used one or more of those approved accommodations. Those that did not use one or more of their accommodations were identified by their failure to pick up their letter from DSS, which are used to inform professors, the testing center, etc. of eligibility for accommodations.

Procedures

After obtaining IRB approval, a DSS provider sent out emails to students that met the criteria mentioned previously. All interested participants were given further information including: procedures of conducting the interview, expected length of time of the interview, and the nature and purpose of the study. Those that agreed to participate were given an opportunity

to provide their informed consent. Measures were taken to keep confidentiality, as follows. All interviews were recorded with a digital audio recorder. The audio recordings were then transferred to a password protected flash drive. Only the principle researcher, transcriptionist, and the auditor had access to the recordings. The recordings were then transcribed, with all identifying information being removed or changed. Once the research was completed and written up, all audio recordings were erased, leaving only the transcripts that had been cleaned of all identifying information (i.e. names, towns, school names, etc.).

Data Collection

Interviews were conducted one-on-one either in person or over the phone. Fourteen of the interviews were conducted in person and two were conducted over the phone. Phone interviews were used to reach participants that were geographically distant from the researcher. Interviews ranged from 23 to 64 minutes, with a mean of 41.1 minutes. Each interview began by asking demographic information, followed by a briefing. The briefing described the purpose of the interview, gave the interviewee a chance to consent to being recorded, and addressed any general questions about the interview. Following the interview, participants were debriefed. The debriefing provided an opportunity to discuss questions that the interviewee might have had, addressed issues or anxiety that came up during the interview, and received feedback or clarification regarding the interview (Kvale & Brinkmann, 2009).

This study utilized a semi-structured interview format to collect data. A semi-structured interview “is defined as an interview with the purpose of obtaining description of the life world of the interviewee in order to interpret the meaning of the described phenomena” (Kvale & Brinkmann, 2009, p. 3). The researcher used a list of possible questions (see Appendix A) that informed the interview and helped ensure that important topics and aspects of the intended research question were not neglected. It is also important to note that the list of questions were

not simply read sequentially and verbatim in each interview. As Kvale and Brinkmann (2009) describe the interview, “it is neither an open everyday conversation nor a closed questionnaire.” (p. 27).

A number of different types of questions were employed by the interviewer in the current research study. Kvale and Brinkmann (2009) outline nine different types of questions used in interviews. Introductory questions act as opening questions that may yield spontaneous, rich information. Follow-up questions extend the interviewees’ answers which may continue further exploration. Probing questions pursue more detailed or further examples of given questions. Specifying questions aim to further operationalize responses and obtain more precise descriptions. Direct questions directly introduce new topics and dimensions, but should be informed by the spontaneous descriptions that the interviewees had previously mentioned. Indirect questions may be used to help the interviewee project their responses onto others. Structuring questions are a way in which the interviewer indicates that a theme may be exhausted and introduces a new topic. Silence is used to allow the interviewee time to reflect and then break the silence with significant information. Lastly, interpreting questions are used to clarify information and interpretation. These questions were used in association with reflective listening and the minimal use of encouragers in an effort to “maximize participant responses and increase the depth of interview content” (Jackson, Smith & Hill, 2003, p. 563).

Data Analysis

The analysis of the transcribed interviews followed the same philosophical and theoretical assumptions that were used in conducting the interviews. It is important to note that the analysis was not a one-time event that happened solely at the end of the research process. Instead analysis happened throughout the research process, including the interview process. During the interview process the responses were interpreted and further questions were

formulated according to the analysis or interpretation (Seidman, 1998). This analysis during the interview allowed the participant to react and help shape the analysis. As Kvale and Brinkmann (2009) put it, "...the ideal interview is already analyzed by the time the sound recorder is turned off" (p. 190).

After the interviews were completed and the audio recordings were transcribed, post transcription analysis was conducted in the following manner. The principle researcher then conducted several broad and unfocused reviews of the transcripts to identify initial themes that stood out (Jackson & Patton, 1992). The text was then reviewed at increasingly deeper levels through successive readings. As themes were identified the researcher then circled back to the text looking for confirming and disconfirming evidence. This process is often referred to as the hermeneutic circle and was used to foster a deepened understanding of the meaning of the interviews (Kvale & Brinkmann, 2009). Identified themes were continually taken back to the transcripts and were re-examined for evidence that both confirms and disconfirms the identified themes. Themes that continued to be confirmed were retained, while themes that weren't broadly supported were removed. An auditor then evaluated the analysis process as well as the themes that were retained. Only themes that were agreed upon by both the principle researcher and the auditor were included. As an additional validity check, these confirmed themes were then emailed to all the original participants to get their feedback as to whether the interpretations match their experiences and intended meanings. Feedback from the participants was then taken back to the text to examine whether the feedback was broadly supported or not.

Assumptions of the Researcher

Kvale and Brinkmann (2009) state that the qualitative interviewer is "the key research instrument of an interview inquiry" (p. 166). As the key instrument of an interview study, it is necessary to consider the assumptions of the principle researcher. It is important to note that the

principle researcher has had personal experiences and relationships with individuals with disabilities. These relationships and experiences have acted in part as motivating factors in the formation and follow-through of the current study. Also, the principle researcher was student without a disability and thus cannot claim to have experienced or dealt with the barriers that come with obtaining access at the postsecondary level. The principle researcher's experience had been largely shaped through participation in a counseling psychology program as well as reading, research, and observations of issues regarding access for SWD. This very limited firsthand experience played a large part in the formation of this study and the desire to utilize qualitative research as a method to investigate the lived experience or "life world" (Kvale & Brinkmann, 2009, p. 29) of the participants. It was also assumed that the participants that receive approval for accommodations and subsequently do not use them were experiencing barriers to access. It was also assumed that the participants would have varied perspectives that would include both positive and negative responses about the accommodation process as well as other barriers to access. Finally, it was assumed that through the described research method the principle researcher would be able to achieve a balance between being a part of the research and interview process without overly influencing those processes (Jensen, 2006).

Results

Analysis of the interviews revealed seven main themes related to barriers that SWD face in regards to accessing and utilizing accommodations. Four of the identified themes are considered complex as they contained sub-themes, while the other three themes were more straightforward and contained no sub-themes. The four complex themes were Desire for Self-Sufficiency, Desire to Avoid Negative Social Reactions, Insufficient Knowledge, and Quality and Usefulness of DSS and Accommodations. The three more straightforward themes were Negative Experiences with Professors, Fear of Future Ramifications, and Accommodations are Not Needed.

Theme #1: Desire for Self-Sufficiency

Throughout the course of the interviews, many of the participants directly commented on the importance of being self-sufficient, while others alluded to it less directly as they discussed the great lengths they had gone to in maintaining self-sufficiency. Many of the participants were working very hard to be able to achieve academically by themselves without having to use accommodations; however, this increased effort to be self-sufficient, as Participant #13 explained, “sometimes it takes a toll.” The sub-themes of this theme were the importance of being independent, being self-accommodating, and using accommodations as a backup.

Importance of being independent. Many of the participants talked at length about the value they placed on independence. Participants often talked about how they intentionally did not use accommodations they had been approved for in an effort to be independent. A number of participants mentioned that their emphasis on being independent was due, in part, to a sense of pride, and that pride often stood in the way of them asking for and receiving help. In general, independence seemed to be a large factor in deciding whether to use accommodations or not.

Participant #3: In a few classes I haven't used them at all. I really want to test myself to see if I can compete at the level of everyone else with the same standards as everyone else and I kind of do it as a test of my own abilities to see if I can do it... I mean eventually I would like to get to a place where I don't need such accommodations anymore that's my ultimate goal.

Participant #4: I didn't go to the teacher and didn't remind them of the accommodation or times when I really could have used some extra time with assignments, but again just didn't bring it up and that's because I just really, I guess I feel like it was important independent of for my own sanity to do everything I could to make it on my own and wanted to be as independent as I could... I really felt like I wanted to, I wanted to be on my own and show that I could do it.

Participant #9: It's been an experience to learn to rely. To learn to rely on other people, and to say okay yeah, I will let you help, like my professor, the same one who did the same thing as the file system said, "How about you just take it in my office, is that okay? Is that kosher because then I don't have to go over there, and you don't have to," and I said, "Is that okay with you? You're the professor. That would be great. It's shorter for me and then I had a really bad day one day, and I said "I can't walk over there." It was just from the library to the [building]. And he brought it to me and he saw how I set myself up away from everybody, and he trusted me that I wanted to learn I wanted to work but it was hard for me to ask, really hard for me to ask.

Participant #12: Also the sense of pride where you want to be able to do it on your own, you want to be able to do it without the accommodations... So sometimes I would do without the accommodations just because I wanted to be able to [do without].

Participant #7: If you've gotten so far on your own as to go to [university], like that's a pretty cool thing, as someone who has dyslexia... And it's really hard to get rid of the pride you have and to go ahead and ask for [accommodations] unless someone offers it to you.

Participant #13: It's not so much the grades now as it is the support and my clinical work and so it's really hard to find that balance, well how much support should I ask for and how much should I figure out on my own.

Being self-accommodating. While participants did not always mention the importance of self-sufficiency directly, many of them mentioned that they would self-accommodate which is one way of maintaining self-sufficiency. One form of self-accommodating involved the participant going directly to professors or classmates and asking for help instead of going through DSS for accommodations. Other kinds of self-accommodating often involved insight by the participants regarding how to better work with their disability and then utilizing that insight by acting in ways that leveled the playing field.

Participant #7: I just feel like the most important for me when obtaining a grade, and I feel like I have learned this because I have disabilities and what not, is how to approach teachers, how to win teachers over, and have teachers really like you so you can share with them your goals and have them help you achieve those goals. And so I tend not at

first to sound like, “Oh I am this big burden on you, I have all these problems”... I tend to talk to them first and then, and as time goes on I share with them some of my problems that I am facing and the things that are going wrong and the frustrations I have with being a disabled student and that seems to allow them to have more compassion my way... [It] really helped me. And I think that would be a helpful thing for everyone especially with people with disabilities, how to communicate one on one with professors... That’s exactly why I think I haven’t utilized [DSS] so much because I have figured out myself. I am glad you noticed that, and I felt super bad when I realized this was about [DSS] because I haven’t used much of it.

Participant #5: Just the fact that I could talk to my professors and it was kind of an inconvenient just to come over to the [DSS].

Participant #7: I just don’t see [accommodations] as a huge beneficial thing to me simply because if I needed to use someone’s notes, I would just ask them rather than go through [DSS].

Participant #13: It’s been a lot of work for me. I feel like it’s been more work for me than for other people, but I can’t know that for certain but it’s been a lot of work though... I haven’t been able to work part time at all because that would have been too much for me, so I’ve spent all my energy and time on school and I’ve done really well... I did fine in the class but I spent a lot of time on it. I got an A but I went to see the TA excessively like every single office hour and she was a really good TA because she knew

exactly what would be on the test and she was really good at preparing me for it so yeah I just put in a lot of time into it... sometimes it takes a toll on me or it takes more time.

Participant #14: Yeah I have to make sure that I get enough rest and I have to take breaks from reading I can't read just sit and read for hours. I have to close my eyes for just a couple of minutes to let them relax. So just it's not a big deal, but little compensations to make up for it.

Participant #2: Labs, organic chemistry labs, my particular section is in a crowded, a full lab, and it's very noisy and just kind of doesn't really allow you to think... so I am going to different section where I don't know the people, I don't know the TA's, and that's hard but at least it allows me a little more quiet and a little more extra time as well so I guess it's helpful than nothing... I try to always do what's effective for me. I have to sit exactly where I need to sit and I get to class not too early but not too late. If I get there too early then I am just sitting there, and yeah that's bad for the social anxiety disorder... I do what I need to manage.

Using accommodations as a backup. Many of the participants wanted to do everything they could on their own and then use accommodations as a backup if things got hard or became problematic. These participants emphasized that it was important to them to be as independent as possible, but at the same time they had the foresight that some circumstances may require the use of accommodations. A few participants even talked about how having the accommodations as a safety net would lower their anxiety and would often help them not need to use the accommodations as much.

Participant #1: Yeah, I only used the letters when I was desperate... Well the one time I didn't pick up the letters was because I got them as a just in case. 'Cause I was feeling like oh this semester like this isn't working for me. I am in deep trouble. And so I requested them and if I needed them I was going to go get them if I really needed to. But I ended up just kind of buckling down and getting things done. And I just used them as a last resort.

Participant #15: Yeah even if you think you are good, do it just in case. If you need it, then you have it.

Participant #5: Like if I was hospitalized and I had a problem with my professor, I could say, "Look I am registered with [DSS] and this is what they've said, and I could go grab the letter," and they could do that.

Participant #8: I guess just like feeling like you have that safety net if something does go wrong, if I do have an episode or anything that like the teacher would be able to understand that.

Participant #13: Even if I don't use the accommodations, it's good to know that it's there for some reason like extra time on the test, that's huge even though I might not take advantage of it. It just kind of eases my mind and reduces the stress and anxiety that I feel and so the times I've gotten it it's usually the case that I finish in the allotted amount of time.

Participant #11: Yeah it was comforting to have a backup in case I got slammed and things got really hard for me. It was nice to know that I could go to them and let them know that I was working hard and could get help. Just know that help was available for me was great.

Participant #12: And it actually helped decrease my anxiety and decrease my panic attacks, knowing that [accommodations] were available to me whether I used it or not and I did quite often... It helped me not need it as much actually.

Theme #2: Desire to Avoid Negative Social Reactions

The interviews revealed a strong desire from many participants to avoid negative social reactions in relation to their disabilities and accommodations. The participants' comments made it clear that accommodation use isn't done in isolation. Many of the participants seemed to be very aware of how accommodation use affects others and influences others' perceptions of the participant. This concern mostly focused on professors and peers. The sub-themes of this theme were not wanting to be viewed or treated differently, fear of suspicion from others for receiving special treatment, and not wanting to be a burden.

Not wanting to be viewed or treated differently. Many of the participants reported concerns about being viewed or treated differently. This included a strong desire to not be singled out or have attention drawn to them. Also of note was a desire to not be labeled or categorized as "the disabled student", and therefore treated as less competent or fragile. In general, participants reported that they worried about being perceived and treated differently if peers or professors learned about their disability and accommodations.

Participant #14: Your thought process in deciding to tell people or not if it comes up or not. Yeah, if it comes up. It's not something I am ashamed of or anything but at the same time I don't want everyone to know me as the legally blind girl... And I really don't want people to feel sorrow for me because there is no need to feel sorry for me as far as I am concerned.

Participant #2: I am very hesitant to put myself into that disabled box with, if I am in a classroom situation and everyday throughout the week I don't want people in there thinking I am disabled because that comes off, if only in a unconscious way just you know that they know that you are disabled and so that's not a good feeling.

Participant #1: I want my professors to see me as a capable young student. I don't want to be the student that has to have extra help... I gave the letter to my professor, and he was really helpful and everything, but I felt like he probably saw me as less because I couldn't get things in on time. And I don't know. My dad is kind of very rule bound. He is kind of that way as a person, and so he's changed lately, but when I was a kid I perceived that he would have looked down on something like that, "oh you can't do things on time." You know and that's not good. And so I assumed, well I was cautious because I feel like my professor would think the same thing.

Participant #3: I think that when professors and faculty see that you are trying to do that and that you are really trying to be on top of things, that they are more accommodating... Yeah, I definitely want to show that I am trying, you know, I am, whenever possible, I will try and turn in assignments or do tests or do whatever on time, but on the same token

you know I just hope that they can perceive it as such and when the time arises when I do need, you know, accommodations, that they are willing to reciprocate and be thoughtful.

Participant #2: And I talked with the professor in private in his office hours and this was just as simple as don't call me in class and don't have me introduce myself and that's it. That's all you need to know, and he felt that he had to tell his TA's about that and that was highly embarrassing because I knew the TA's and yeah it was just a very bad situation he actually copied them when I, I told him my problems in the email and he copied them in the email and then replied back to me. So they got the whole they, they saw everything that I sent to him and I was mortified. That was horrible.

Participant #7: I used the note taking at the start but it's kind of, I don't know how to explain it, it's kind of humiliating. Like I wish I don't I knew how it's set up, my freshmen, the first semester I was here, I was told to go tell the teacher like that I need a note taker and I thought he was going to just say, "Hey we need someone to help [name] take notes." I thought he would confidentially say that but he said, "Hey we need this guy to have his notes taken because he has a disability."... So it was like a huge mix-up. I didn't understand what was going on and he was kind of, I don't get embarrassed about my disabilities ever... Yeah the whole class just kind of turns to you and you are like, "Oh this is really embarrassing."

Participant #12: It's a little bit humiliating honestly I don't think it should be, but it is. Giving them this letter and saying, "Hey I am in your class. I am going to work as hard as

I can, but it may not be up to par, so could you cut me some slack”, and it’s a little bit humiliating... to have to ask for the help.

Participant #10: There are of course misconceptions for some who have mental disabilities but given what I do they usually understand. I work in the [lab]. I am in the honor school. It kind of removes any doubt of my mental capabilities.

Participant #15: I think maybe when I first had my liver transplant because I thought it was more serious and so I didn’t want people to feel bad for me but since then I don’t care if people know. I tell everyone I didn’t want, if someone gets cancer you are going to feel bad for them and I didn’t want anyone to feel bad for me.

Participant #3: I don’t want to be the victim. I don’t want the pity of others. I want to be a normal person, you know, and I just want to use these accommodations to make me as normal as possible or to meet the deadline as normally as anyone else would, so I don’t want to be viewed by anyone else differently or I don’t want any undue pity or jealousy.

Participant #9: You are so amazing. I don’t know anybody with a disability who likes to be called that, who likes that said about them. You are so amazing. So it’s the individual and also just because you see my wheelchair doesn’t mean you understand what the problem is because like [DSS provider], people say why don’t you ride the bus? Well her disability doesn’t allow her to ride the bus because of where it is. It would kill her. But

that's different than a lot of other people who are in wheelchairs who do ride the bus. Just because you are in a wheelchair, doesn't mean that you are all the same.

Participant #12: And you don't want to be treated differently too. Even if you need the accommodations, it's a little condescending sometimes if the teacher starts treating you differently and babying you a bit. So it's kind of a Catch 22. So you may need the accommodations, but you also don't want to be treated differently even though you need to be... Yeah. There was one professor where I turned the letter. They were very, very kind but I almost was afraid they would grade me too easily because we were working on deadlines and I was turning things in, but I didn't want them to be afraid of critiquing my work because I might have anxiety over it or stress because I noticed in the class when I would mention, "Oh man this week would be crazy." They would kind of get a little wide eyed. I was worried that they weren't critiquing me and giving me the feedback that I really wanted because they were afraid that it would stress me out or give me a panic attack. They were tiptoeing a little bit. So it's hard it's just complicated... It's hard because you are asking for them to, you are asking for them to handle you a little more gently with the accommodations, but at the same time you don't necessarily want to be.

Fear of suspicion from others for receiving special treatment. A number of the participants' comments focused on being aware that others might think they are taking advantage of the system or receiving special treatment that they don't deserve. A large concern involved peers and the idea that peers might be jealous or suspicious of the accommodations that participants were using. Many participants also said they felt like some professors question the

legitimacy of accommodations, and often the participants reported being extra careful to not give professors any further reason to be suspicious of them.

Participant #3: I just don't want [peers] to get the wrong idea just because I have a feeling that other people might view it and think that like they're getting an extra benefit in the class that I don't get or something else that they may not be able to see on the surface, so I just kind of want to avoid it altogether, and so I don't even bring it up.

Participant #13: My only concern if [peers] knew about an accommodations to feel that it's not fair because they are not getting it so that would be a concern.

Participant #4: The only thing I remember ever having was other students on more than one occasion I would, a student would see me, you know parking in a handicap spot or in a faculty spot or something like that and say, "Gee how did you get such a great parking spot." And at first I'd say, "Oh yeah, it was wonderful. First I fell 75 feet off a cliff and spent 4 months in traction." Eventually I decided that was a little, maybe a little bitter, so you know I stopped saying that, but it just struck me as a weird thing to say to someone who clearly has a handicap tag on their car... it maybe happened, I can think of 2 times it happened during the MBA program and maybe a couple other times in the undergrad and that's kind of the worst I can think of and other than that I really can't remember any of the times it came up.

Participant #9: When I was in a wheelchair, I really didn't have any worries. Honestly, it's when I had a cane because it's like, you are not bad enough, they don't trust you. I talked to my friend who has a reading disability, and his dance teachers suddenly gave

him a written test in the middle of class, and he said I've been in industrial design for 2 years, I don't have my testing center card current, I haven't needed it, and I thought how easy it is for me to go to the testing center and say I need an alternate room this is my scribe because I have this big wheelchair. It's a lot easier for me than him going up. He looks normal and he says I need an alternate testing room and here is my testing scribe. And they don't believe him and he understands that, and he is okay proving it

Participant #15: I hate always having to tell my teachers I am sorry I am sick again so can I turn this in late. I feel like sometimes they think I am taking advantage. They do because, I know that they are good but it's how I feel inside.

Participant #12: I think when the students have the letters, if you don't mention it to the teacher or get it to them right off the bat it's kind of too little too late. If you bring it in later for a lot of teachers it seems like they might roll their eyes or they might not really take it seriously or you are just bringing it in as an excuse... If I haven't taken them in the beginning of the semester, I usually just count my losses and just deal with it and get a lower score.

Not wanting to be a burden. The accommodation process at college takes the involvement of many individuals including DSS providers, administrators, and professors; many participants commented that they were concerned that they were being too much of a burden on others. At times participants would simply choose not to use accommodations that would have helped, instead of putting extra burden on others.

Participant #1: And I would never ask for [extra help]... Because I feel like it's asking too much, asking too much of professors, asking too much of the university, trying to make my life easier.

Participant #7: When things have been tough, I've sometimes gone in [DSS], but a lot of the times I want to do stuff on my own which is not good, and I need to get over that, like I need to just ask for help, like ask for assistance... I don't like bothering people at all. I hate it. I hate bothering people.

Participant #9: Not wanting to be a burden and that comes from my past because I was abused a lot. Because there is this underlying thing that I am the problem... it comes from my history of feeling like I am always in the way and I am the problem, but I am learning that I am not and it's wonderful when professors will go, "I know you are working hard, I know you are doing your best. I don't mind doing this for you." And I will go, "Really?"

Participant #10: I try not to be needy so I don't see [DSS] everyday, every month, every semester.

Participant #13: I got along okay without it so I think I didn't want to be a burden on them... That's another thing for sure I don't want to burden people. I don't want to take their time... I started feeling like [DSS provider] was really busy and didn't have a lot of time and so I kind of I think I stopped going.

Theme #3: Insufficient Knowledge

Many of the barriers to participants using accommodations dealt with a lack of knowledge. Many participants either didn't know about available accommodations or didn't use them because of incorrect or insufficient knowledge. This incorrect or insufficient knowledge often was in regard to their disability and available accommodations. Some of the participants' reports of having insufficient knowledge had to do with their current situation, while other reports had to do with having insufficient knowledge earlier in their college experience but it wasn't a problem for them anymore. This suggests that many of the barriers within this theme of insufficient knowledge may be remedied through education and experience early on in one's college career. The sub-themes of this theme were question of fairness of accommodations, lack of awareness of DSS and available accommodations, and question of being disabled enough.

Question of fairness of accommodations. Questioning the fairness of receiving accommodations was a common dilemma for many of the participants. This seemed to be an important moral dilemma that participants wrestled with again and again throughout their college experience. Many of the participants even struggled during the interview with whether accommodation use was fair or not. The questioning of fairness often seemed to stem from a lack of understanding concerning participants' disability or the accommodations that are legally afforded to them. In addition, for many participants this fairness issue was often brought up in relation to their classmates. One participant stated, "It just seems so unfair that... just because I am having a struggle in my life that I should get something that other people don't get".

Participant #1: Yeah I think that's one of the reasons that I haven't used the letters other than that because I feel like it's not fair for me to have these extra accommodations... Every time, it just seems so unfair that, just because I am having a struggle, it's a hard struggle, but just because I am having a struggle in my life that I should get something

that other people don't get. My, I just wasn't raised to think that was okay so it's kind of like you deal with what comes and you just need to make the best of it. That's kind of how my parents were, taught me. And so I think that's why I feel like it's kind of unfair.

Participant #15: I feel like sometimes professors think I am taking advantage. It's how I feel inside... Or maybe I really will take too much and so I am careful about it.

Participant #13: In my physics class, it was tricky for me and so I went in for the oral test format and she did it with me and you know it was great... I even wonder if it was legit to do it the way we did it because I had already taken that multiple choice test and then we went through the ones that I had gotten wrong and I was able to expound on the multiple choice questions I had gotten wrong and then she gave me partial points... So I thought that was really accommodating, and I wondered if it was maybe even too accommodating.

Participant #12: I guess also when you see other students that are struggling because I know I had some other students some friends. They had anxiety or they had issues that were going on and they didn't ask for help, they just kind of cut their losses, got the lower grade. So it made me feel like maybe I deserve the lower grade maybe if I can't do the work on time or can't take tests in the testing center because it creates anxiety, maybe I deserve the lower score or deserve the lower thing because I can't do it. Sometimes I felt like maybe accommodations were falsifying what I was doing, where if I was getting those accommodations and they were helping me get higher grades maybe I deserved the lower grades because I didn't do it on my own.

Participant #10: There have been times when I have tests and I asked the teacher did the other guys finish because if the other guys didn't finish I am going to feel bad if I took time and a half and could finish and that's been the same at law school and they dismissed it so now I don't feel bad about taking the full time, but in the past it has been kind of a question because I don't want an unfair advantage or unfair disadvantage.

Lack of awareness of DSS or available accommodations. One of the guiding questions in the interview dealt with how the participants had learned about the services available to them for their disabilities; many of the answers included details about how at some point during college they had been unaware of DSS and accommodations. In addition, some participants talked about how even after registering with DSS and receiving accommodations, they still were not completely sure of what accommodations and services were available to them. A few of the interviews also contained suggestions about better advertising and visibility for DSS.

Participant #5: I don't think I'd heard of [DSS] at all. And I had to ask [the professor] where it was and he was like I don't know. Look it up on the website. So I looked it up on BYU's website and just had to go through that... So maybe sending out emails to new students or something. Just maybe a mass email. These are the services we can provide, so if you need help with any of the stuff, that kind of a thing. Because I didn't think too, especially because I just have diabetes and Addison's, I don't have any physical disability or mental disability. That's what I thought [DSS] was for. I didn't realize they could help me as well so kind of making sure there is no misunderstanding about who [DSS] can help.

Participant #8: Like the best thing I would say is when the teacher kind of reached out to me to say, “Is there something I can do to help,” because a lot of times I didn’t know what to do, I didn’t know how to get help.

Participant #9: I started college in [year] and if I had been aware that there was accessibility I might have stayed in school because it was depression, anxiety too. I would do really well one semester and then I’d be severely depressed the next semester and get incompletes and fail out of everything, then I would stay home and save money and payoff the hospital bills and then I came back and the same pattern happened again.

Participant #12: I was withdrawing from a semester because I couldn’t handle it, so I withdrew from a few classes and spoke with a counselor at the Discontinuance office who mentioned [DSS] and then referred me there, which is an appropriate way because those are students that are in bad shape looking to discontinue because they can’t overcome the struggles that they are dealing with.

Participant #16: Yeah I went to the multi cultural center for a scholarship and they noted that I could go to [DSS] to consider myself fulltime at 6 credits because I was only doing 6 or 9 or whatever and so I said okay I will contact them so I did that and I got additional accommodations which I didn’t know I could have.

Participant #1: I guess I didn’t really feel like I knew what kinds of accommodations were available. I would liked to have a little bit more, you know, maybe like a little a

pamphlet, like these kinds of things are available if you are struggling... I guess I haven't been that aware of what other options were available 'cause I think that's all I was approved for the letters I'm not sure... I wish my [resident assistant] had known about [DSS]. And I think if she had known about it, because I did tell her I was feeling really depressed, but I think she recommended the counseling center, but she didn't know about [DSS]. And if during their training they had learned about that during their training I think it would have been helpful.

Participant #7: I finally received an email this year saying, "Hey you qualify for priority registration." And I'd never received an email, at least one that I've seen saying that. I think a lot of the problems that lies within like me is the experience I have and with [DSS] is not knowing what I have... I am never completely clear and aware of I guess my rights or the things I've been given. I never fully understand what I can and cannot do... [community college] they would sit you down and they'd even call you and say, "Hey this is what you have, this is what you can do".

Question of being disabled enough. A common belief or misconception among many of the participants was that they were not disabled enough to use DSS or accommodations. Often the participants who endorsed this misconception were students with emotional or learning disabilities. Often they compared themselves with students with physical disabilities and deemed themselves not disabled enough. One participant even made a comment concerning worrying about not being disabled enough for this study.

Participant #12: And at first with [DSS], I felt insecure going to them 'cause I was like, I don't have a disability. I just have panic attacks. I'm not in a wheelchair. I don't have a

disease or anything like that, and that was really hard at first... I think those students that do come in with legitimate concerns and with disabilities that they need accommodations for, helping them understand that [DSS] is not just for physical disabilities would probably be helpful because I think it kind of has that stigma.

Participant #9: And part of it, I wasn't in a wheelchair yet so I don't think, so I didn't think that I was bad enough and that is some of my own deep insecurities. I am still dealing with the idea that, especially with anxiety, 'cause I am having a lot more trouble with anxiety now. "Oh no I don't really have a disability I just have a stressful life. You shouldn't help me. I should just be tough and do this on my own."

Participant #15: I know I have a disability, I am not hiding that or anything. I think it's just the fact that other people, their disability is more severe than mine. They need it more than I do. I feel like I am taking advantage of it. I don't know why... And [DSS provider] even made a comment like even though your disability is not as visible, it's still just as important as anyone else's to take care of and so that helps.

Participant #14: I was intimidated by how many people that worked there were severely disabled. Because I felt kind of bad asking for help when I am like, "Man these people would really need it. There are people a lot more disabled than I am."... Again I was kind of intimidated because I thought I might not be disabled enough for your interview... There are a lot of people who are totally blind or totally deaf or can't walk so you know and I don't think of myself as disabled most of the times so I guess it's a weird thing. But yeah so I hope I don't skew your data or anything.

Theme #4: Quality and Usefulness of DSS and Accommodations

The quality and usefulness of DSS and the accommodations they provide were also mentioned as major barriers to the use of accommodations. This includes problems with the process of working with DSS and setting up accommodations. Participants also talked about accommodations that were not available that may have helped them with their disabilities. Finally a number of interviews mentioned that some of the accommodations that were provided were not effective and in some instances even detrimental to learning. The sub-themes of this theme were: process of requesting and receiving accommodations, certain accommodations are not available, and accommodations are not effective.

Process of requesting and receiving accommodations. The process of requesting and receiving accommodations includes the participants' experience first approaching DSS, meeting with a DSS provider, ongoing contact with DSS, and the implementation of the accommodations. A few of the participants spoke about negative experiences and interactions with the DSS and DSS staff and providers, which discouraged them from accommodation use. Sometimes the process of requesting and receiving accommodations broke down to the point the student never received the accommodations, while other times the inefficiency of the process discouraged the participant from using accommodations in the future.

Participant #4: I do remember that it was kind of hard to find, like hard to get on the schedule so I do remember that my first semester it was a couple of weeks into before I actually had my interview with her and then something that I thought that I still think is kind of weird you know, that after I met with her she had, kind of, to write up the accommodation letters and then wait for someone to print it, and then they had to wait for

her to sign, so it was like a month between when I finally met with her and when I actually had the accommodation letters in my hands.

Participant #5: The secretary wasn't the nicest but other than that it was fine... She was just kind of like grumpy I don't know if she having a bad day or something but you know how most people you walk in and they greet you and they are like, "How are you doing yada yada yada" And she was just kind of what can I do for you and I was like, "Well I don't really know. I am supposed to come meet with someone." So I had set up an appointment. And the lady I met with, I don't remember her name unfortunately, she was really nice who wrote the letters to my professors and stuff... I was just like I don't know if I want to come here again.

Participant #1: I saw [DSS provider]. And I kind of felt like he was working against me a little bit. I felt like I had to sit there and say no really I need help like you are not listening to me and so it was a little bit frustrating going in to talk to him and I was glad that he gave me any kind of accommodations cause just from the way he was talking I just didn't feel like he was going to do anything about it.

Participant #7: I receive emails all the time from [DSS] but not a lot of it pertains to me. I feel like a number like honestly these mass emails that are sent to me, and it's like, I don't care about this, like here's what's going on and win this scholarship and that's great to know about the scholarship, but like apply to this program because you have a disability but there's nothing that's ever addressed to me personally there so I will miss a lot of really good information because I feel like it's for the masses

Participant #8: Maybe just having more of a like check in with the counselor, like to see how you are doing to see what's going on... some follow up meetings.

Participant #9: The same thing with the testing center. 'Cause they are like, "Come over to the testing center." You go to this office and get your accommodation thing and so I went up there expecting to be handed the test, and that isn't what happened. I had to go up the stairs, which is hard for me because I didn't know where the elevators were and I didn't have the energy to find them. I can't walk very well and they said, well you need to go up there and get your test and then go down to the accessible rooms. And so then I walked here and here and then here and I walked down and then I went back up and went back down and then I went over to [DSS provider] and said that was dumb. I can't walk that much.

Participant #13: I didn't use note takers, well I tried but no one ever responded... It would have been kind of nice, but usually people didn't respond because they just email everyone in the class right and see if they would be willing... I don't know if it's more efficient just to do it yourself, do it the way I did it, just finding strategies, maybe it would have constituted working smarter than harder, but I ended up sometimes working hard rather than taking advantage of accommodations. That would have made it more efficient for me but I made it and I am here.

Certain accommodations are not available. All of the participants in this study had been approved for at least one accommodation through DSS, but many of the participants

mentioned or suggested that other accommodations which were not available might be helpful to them. Sometimes participants weren't entirely sure if certain accommodations were available through DSS or not, they just knew that they weren't currently available to them. A few students had been to other universities or community colleges and had used helpful accommodations that were not available at their current university.

Participant #2: It would be nice, I mean if I were to go the extreme I know it's not very realistic but if I could know like what would be expected out of each course before you signed up for it, if you had a special catalog that says, "Okay in this particular professor's class, he likes to do this and this and this and this applies to your social disorder or your fears."

Participant #1: I guess if the lectures had been recorded instead of having somebody else take notes for me because I think that would be less helpful because then I would feel I didn't know if I got all the information still but if the lectures were recorded then I could get the recording of it... Then I could be like I am getting all the information. And it's okay that I couldn't get out of bed today because I still got everything I need. It's like I still went to class. That's the one thing I can think of that would be helpful.

Participant #16: Yeah they asked me to explain my story like my history and things that had happened and they gave like the only, one time, sometimes I have trouble getting up in the morning because of my medications, and I tried to get support for going to school late but I didn't really get support for that.

Participant #9: I think they do have, but I don't where to find, it that is maps how to get into a building and maps of the classrooms because I could plan out where I am going to sit, because it is hard to go into a classroom and go oh great, where am I going to sit?

Participant #7: So I just felt like the [DSS], it was lacking in a lot of the things I needed in comparison to [community college].

Participant #4: I started out my undergrad at a different school in [state] because I was still being treated by a back surgeon, and kind of had to stay close to his office because he was the one who performed the fusion in my back. And there it was actually a pretty big issue that the school, I just really didn't have a lot of accommodations, and so you know the first day I got there turned up at the dorms, they didn't have any parking. The closest parking was a quarter mile, a ways, and there were stairs to get into the building and then some of my classes were in buildings that didn't have elevators and things like that. So just to kind of add that to my college experience there. It really did cause a lot of problems.

Accommodations are not effective or helpful. Some accommodations were reported as ineffective or not helpful by the participants. Often participants had stopped using accommodations because they didn't find them to be useful to them. In some cases, participants reported that they felt like some accommodations might even put them further behind in their classes.

Participant #7: I still do have people take notes. I just didn't find it too effective. I don't study well off of notes, other peoples' notes especially. I just don't see it as a huge beneficial thing to me

Participant #10: I remember one time a test scribe couldn't understand me, and it was a mess. So it made it very difficult, but after that I started requesting people who knew me.

Participant #9: The depression and anxiety one is really hard because they always say you can have leniency with absences and with due dates, but that doesn't really help because if you get behind, you don't catch up... I am still behind and the finals still coming, the papers still coming, I am going to take an incomplete. Every class they can only accommodate you do for a few days with the final because they have to get their grades in, so I've never quite understand how that worked.

Participant #14: So the digitizing thing is because it would be a hassle to get your books that early and get them turned in that early. Like I go home for the summer. I wouldn't be in [State] to turn in my books that early. And again, I go home for the summer so like for fall semester I wouldn't be in [State] to turn in my books 3-4 weeks early. I get here just in time for the semester.

Participant #2: If I have to ask for something like exam due date extension then I do have to get a letter and a lot of the time I do feel like it's just a kind of a hopeless thing.

There's a lot of hopelessness in being disabled person. It's like if you ask for an extension on your exam due date you are just going to get behind in your next exam, you

are not going to be able to keep up with the class because you are starting old stuff while everyone is starting the new stuff and so it's kind of a self-defeating thing to ask for a letter so that you can get behind more and that's another reason why I haven't used [DSS].

Theme #5: Negative Experiences with Professors

In relation to accommodation use, negative experiences with professors seemed to be a major barrier. While many of the participants mentioned that the majority of their experiences with professors were positive, almost all of the participants could recount, often with great detail and passion, a negative experience they had with a professor in regards to accommodation use. Many of these experiences involved the professor simply not honoring the accommodations the participants had been approved for. While other professors didn't necessarily deny the accommodations outright, the negative experience with professors would often cause the participant to question whether to use accommodations in the future.

Participant #3: Yeah for the most part. There's been some really, I want to say defiant faculty that just almost think like, "Great you have a letter, it doesn't apply to me, and my program is like this and this." You know, they don't want to give an inch... For example one of the math classes, the math class that I'm in right now. The professor is extremely rigid and he won't give any sort of accommodations, even though, and it's like, you know, how you see in the syllabus, "students with a disability, blah blah." It's almost like it's in there because it has to be in there rather than he means it... I would have to say that with this math professor that I have had the issues with that I am much less likely to ask for anything from him because I just know that it's going to be met with resistance and defiance.

Participant #12: And I know that it's not supposed to be that way and professors aren't supposed to perceive it that way, but there has been a few times where I am talking with a professor, letting them know that I have struggles and sometimes they are great, sometimes they are oh my goodness I have struggled with that, or I have a cousin who has a disability and I will work with you any way I can. And most professors have been that way, but there have been a few where the air they give off when they are doing their introduction to the course, if you have disabilities if you have excuses you need to make, don't even bring them to me, just drop the class ... Where they are basically saying don't come to me pleading for help or giving me excuses because there are no excuses, either you can do it or you can't.

Participant #13: The professor and usually they don't do timed tests and usually they don't do the timed tests at the graduate level, but this professor did and so I asked him and he didn't want to give me the extra time which I thought was a legitimate accommodation. The other one the oral test format, maybe not so much but I said okay and I talked to [DSS provider] and he said yeah I think it is legit, and so he talked to [another DSS provider] who also agreed and so I called the professor back and at this point he was at a conference and he didn't seem very happy that I was continuing to pursue this but he said it wasn't going to give me time and a half but he was going give me time and a quarter instead of time and a half, and so I was like okay but then when I hung up I felt upset that he wouldn't just give me that extra quarter.

Participant #9: Then I will go up to other professors, and I will go, “This is my accommodation letters.” And he will go, “What do you need?” And that immediately shuts you down. I say, “I will need an alternate testing format.” “Well don’t worry about that.” I said, “I will need to see the power points.” And it’s just really curt and it makes you not want to go back to them at all... There was a professor once, to my friend who is deaf was like, “I can’t give you the power points cause that wouldn’t be fair to everyone else. I wouldn’t be fair.” And my friend goes, what I really wanted to say was, “You want fair? I want my hearing back!”

Theme #6: Fear of Future Ramifications

One of the considerations many of the participants seemed to be worried about is how accommodations might potentially be of disadvantage to them in the future. These potential disadvantages range from professors writing less positive letters of recommendation to diminished future job opportunities. A more personal concern was that accommodations might act as a sort of crutch and limit the benefit and skills they might gain during their college education.

Participant #2: I guess we’re supposed to, as part of the academic process, develop relationships with professors, and a good way to destroy that, is to always have to ask for accommodations. They are not going to recommend any letters if you are not keeping up with any of the other students... I didn’t know if [having a disability] was going to go on my transcript. I didn’t know there were real problems that were associated with actually going in and getting registered with [DSS]. Yeah, I didn’t know anything.

Participant #7: Yeah that might be helping me. And part of it, I know this sounds ridiculous but this is the truth because I have proved myself as high achieving student, and a student that is ambitious and what not, I feel it's grounded in nothing, besides the fear that I have, like I fear if I keep going into [DSS] and they see that I have good grades, they are going to take away some of the things they've given me.

Participant #12: Some of the teachers where I really, really respected them and looked up to them and wanted to use them as references, I have not given them letters simply because if I am going to use them as references, I don't want them to know that my disability has ever existed because maybe I am not struggling with it now but if they are going to be a reference for me, I guess I was afraid that they would hold back in referring me for a job because they knew that possibly at one point in time I struggled with meeting a deadline or anxiety and if it's a high stress job they might not recommend me.

Participant #16: It's just that sometimes I want to be able to do without any help because then I might be better prepared for the work force... It just makes me worry about the workforce when I graduate.

Participant #11: They can be a huge help to you at times. One of the accommodations that I qualified for is a microphone that you talk into that types for you. Which is really cool. But if you are not a very good typist and you use that all the time, you will never be good at typing.... I feel like using those accommodations could cripple me in a way.

Participant #6: I guess the only thing like I said, the only thing my disability gives me any problems with is writing stuff, but I can't, there's not really anything I can do to get around that I just can't write or something, so if the only accommodations they give me is basically let me not learn how to write which kind of takes away the whole point.

Participant #11: You won't always have accommodations. Like at work they won't extend deadlines for you. That's not how it's going to work. That's one of the big differences between education and the working world. That's something that I've learned. I tried to get a job where they didn't give a crap like if you weren't the best you weren't going to get the job. And sometimes I feel like those accommodations can cripple you. You can speak into the computer and it will type for you, but for applying for a job they're going to ask you how many words a minute you can type. So those things can really be a help for you but they also might really hurt you.

Theme #7: Accommodations are Not Needed

For a number of different reasons, often available accommodations simply were not needed. Sometimes the participants felt like they did not need accommodations for their specific disability or that the condition of their disability had lessened thus they had no need for help. Other times participants reported that the specific requirements of a class did not require them to need to use accommodations to do well in the class. In general, many of the participants endorsed this idea that at times they simply did not need to use available accommodations.

Participant #6: I don't really feel like there is anything I need [accommodations].

Participant #12: Yeah my disability is not as prevalent. I haven't needed the accommodations... I mean in some cases your disability improves and you don't need those accommodations anymore.

Participant #11: I might not need to use [accommodations] because the class isn't very hard.

Participant #14: Usually [professors] will tell us ahead of time like what their test format will be and whether or not it is timed and how much time we have. So maybe I can judge whether or not I need help... I mean if I didn't use extended time on a test it was probably because it wasn't timed, which most of my tests aren't timed. You can take four hours if you wanted.

Participant #15: Yeah I don't use the note taking or longer test time because right now all my classes are have online PowerPoints and I don't really need note takers and the test time I think it's just because I feel like I don't need it.

Participant #14: I will ask how many questions there are and how much time we have. Because if it's something I am really comfortable with, like a psychology test, but something harder like chemistry, I would need a little more time.

Participant #3: Well, let me think, in certain classes I may not have needed all of them, I may have been able to complete the homework on schedule with everyone else, and I just

didn't need it and I'm not going to ask for an accommodation I don't need so I guess it would be primarily on the basis of need.

Discussion

The current study aimed to examine barriers to accommodation use by interviewing students who have specifically been identified as having faced barriers to accommodation use. This was done through semi-structured interviews with SWD that had been approved for accommodations and subsequently had not used one or more of those approved accommodations. The study will be discussed in terms of the findings and how they fit into past research, implications of the findings, limitations of the study, and directions that might be taken for future research.

Summary of Findings and Contribution to the Research

Analysis of the interviews revealed seven main themes and a number of sub-themes. The first theme was desire for self-sufficiency, with the sub-themes of importance of being independent, being self-accommodating, and using accommodations as a backup. The second theme was desire to avoid negative social reactions, with the sub-themes of not wanting to be viewed or treated differently, fear of suspicion from others for receiving special treatment, and not wanting to be a burden. The third theme was insufficient knowledge, with the sub-themes of question of fairness of accommodations, lack of awareness of DSS and available accommodations, and question of being disabled enough. The fourth theme was quality and usefulness of DSS and accommodation, with the sub-themes of process of requesting and receiving accommodations, certain accommodations are not available, and accommodations are not effective. The fifth theme was negative experiences with professors. The sixth theme was fear of future ramifications. The seventh theme was accommodations are not needed.

It is important to note that the current study builds upon past research, especially Marshak et al.'s 2010 study, while contributing new perspectives and information through interviewing a population that hasn't been previously studied. The current study, which used

similar methods, is confirmatory in nature as the findings largely confirm and support Marshak et al.'s study, with a few key differences. Marshak et al. (2010) clustered their findings into the following five themes and sub-themes. The first theme dealt with identity issues, with the sub-themes of desire to shed stigma of high school identity, desire to not integrate the presence of a disability into their identity, and desire for self-sufficiency. The second theme was a desire to avoid negative social reactions, with the sub-themes of fear of resentment of other students for special treatment and not wanting to be singled out. The third theme was insufficient knowledge, with the sub-themes of question of fairness of receiving accommodations, confusion about accessibility and DSS services, and lack of training in how to explain their disability to others. The fourth theme was perceived quality and usefulness of services, with the sub-themes of expediency of service delivery and lack of compatibility with accommodations. And the fifth theme was negative experiences with professors.

Although the current findings largely confirm and support the findings of Marshak et al. (2010), there are a few key differences. In the current study, analysis of the interviews did not support Marshak et al.'s first theme of identity issues as a broad theme, but instead the subtheme of desire of self-sufficiency was identified as a main theme with the sub-themes of importance of being independent, being self-accommodating, and using accommodations as a backup. Regarding the second theme, the sub-theme of not wanting to be a burden was identified in the current study which was not identified in Marshak et al.'s study. In regards to Marshak et al.'s third theme, the current study subsumed the sub-theme of not wanting to be singled out, into the new sub-theme, not wanting to be viewed or treated differently, as well as adding a new sub-theme of not wanting to be a burden. The current study also expanded upon Marshak et al.'s fourth theme and added the subtheme of accommodations are not effective. In addition to these five themes, two new themes were identified in the current study. These themes were the sixth

theme of fear of future ramifications, and the seventh theme of accommodations are not needed. These differences (changes to sub-themes and two entirely new themes) may be a result of the unique population sampled for participation in the current study. Marshak et al. (2010) reports that the participants for their study were SWD that had registered with DSS and makes no mention of whether the participating students had actually encountered barriers to seeking or utilizing accommodations. While many SWD have faced barriers, not all report facing barriers to postsecondary education (West et al., 1993). This suggests that the participants in Marshak et al.'s study may or may not have faced barriers to accommodations. The current study specifically identified a population that had been approved for accommodations and then didn't utilize at least one of those accommodations. Since the participants for this study were specifically identified as having faced barriers to using accommodations, they may have been able to provide new insights or themes and more specificity in sub-themes than was available from the populations used in previous research on the topic.

These two new themes (six and seven) are new and previously unreported in the literature regarding barriers to accommodation use and deserve further explanation and discussion. The sixth theme, fear of future ramifications, was mentioned by many of the participants; these included worries about the negative effects accommodation use might have in the future. Some of the worries were a result of lack of information, including a fear of their transcript including disability or accommodation types as well as the fear of having accommodations taken away for getting good grades. Other worries included fear of professors not writing strong letters of recommendation, and fear that accommodations might hinder their abilities to develop skills (e.g. writing, reading, and typing). For many of the participants future ramifications were important considerations in deciding whether or not to use DSS and accommodations.

The seventh theme, accommodations are not needed, was another new theme that many of the participants endorsed. Participants discussed not needing accommodations in terms of context. Often accommodations were not needed because the class was set up in a way that didn't require accommodation use (e.g., no timed tests). Other participants felt like they did not need accommodations for their specific disability or that the condition of their disability had lessened, thus they had no need for help. Depending on the context often participants would not seek out DSS or use previously approved accommodations.

These two themes (six and seven) in particular raise the question of whether accommodation use should always be encouraged for SWD. Previous research regarding barriers to accommodation use often approached the topic in such a way as to imply that the ultimate goal should be to identify barriers, eliminate barriers, and increase accommodation use as much as possible. This is a reasonable stance considering research that has shown that when SWD use accommodations they are more academically successful (Salzer, et al., 2008) and ultimately boost graduation rates (Vogel & Adelman, 1990). While this suggests that an overall increase in accommodation use for SWD is likely to increase overall academic achievement and graduation rates, it is worth considering that for some students in some contexts, accommodation use may not always be most beneficial.

Implications

Since many of the results of this study mirror those of Marshak et al.'s (2010) study, many of the implications mirror the implications of that study. Marshak et al. (2010) provided general implications and suggestions for SWD and DSS providers, based on their five identified themes. The main implications and suggestions from this study stem from the new themes and sub-themes that emerged from this study.

The first theme of desire of self-sufficiency was identified as a main theme with the sub-themes of importance of being independent, being self-accommodating, and using accommodations as a backup. This increased emphasis on self-sufficiency suggests that DSS take more seriously SWD's desire to be independent and the ways in which they strive to be independent. Honest conversations between DSS providers and SWD about ways in which the student's needs may be met without sacrificing independence may help in encouraging SWD to utilize beneficial accommodations.

The newly identified sub-theme, not wanting to be a burden, also has possible implications and application. Many of the participants mentioned that they would sometimes just not use accommodations rather than burden professors and DSS providers. An increased effort from professors and DSS providers to welcome and encourage SWD may help decrease this worry of being a burden. One student mentioned that when she was working with a DSS provider it appeared that he was very busy and overburdened. It is a strong possibility that DSS providers truly are over-worked and overburdened. In this case, increased resources and personnel for DSS would help in easing the burden on providers and lessen the appearance of DSS providers being overburdened.

This study identified the new sub-theme of SWD questioning whether they were disabled enough. This sub-theme suggests certain implications regarding disability type. This sub-theme was primarily endorsed by students with emotional and learning disabilities. Often they felt like they shouldn't receive accommodations because they weren't as disabled as students with physical disabilities. DSS providers can play an important role in educating and helping SWD understand that they deserve accommodations and equal access. As one student stated, "[DSS provider] even made a comment like even though your disability is not as visible, it's still just as important as anyone else's to take care of and so that helps." In addition, increased advertising

concerning who is eligible to receive services at DSS may be helpful as many participants reported that they used to think DSS was just for students with physical disabilities.

Another new sub-theme identified by this study is that some accommodations are not effective. At times the accommodations were reported as not helpful or efficient, and sometimes participants mentioned that accommodations even put them further behind in their classes. It is important for DSS to make sure that SWD are getting the most benefit out of the accommodations they are using. Also from the interviews it seemed that when some accommodations weren't effective the participants were less likely to use other accommodations. Conversely, if accommodations were more beneficial, accommodation use in general was likely to increase. One student mentioned that it would be very helpful if DSS more closely monitored the progress of the students and the effectiveness of the accommodations they were using. A closer look at accommodations and accommodation effectiveness could prove very valuable for SWD.

Other implications from this study stem from the two newly identified themes of fear of future ramifications, and accommodations are not needed. These two themes suggest that a new way of conceptualizing the nonuse of accommodations may be in order. Instead of looking at nonuse of accommodations as simply a barrier that must be eliminated, it may be helpful to entertain the possibility that depending on context, there may be times when accommodation use may not be needed or even be detrimental. This suggests that DSS providers may be more effective if they take into account the contextual factors of the student, and involve the student more in the process of discussing whether an accommodation may be helpful or not for their situation. This falls in line with the recommendation of previous researchers that accommodations should be considered on a case-by-case basis (Frank & Wade 1993; Salzer et al., 2008), rather than one-size-fits all.

In general these findings have implications for better educating college faculty, administrators, and students with and without disabilities. Considering the large number of negative experiences participants reported involving interactions with faculty, programs aimed at educating faculty in regards to disability legislation, SWD, and accommodations may aid in reducing those negative experiences. As faculty are aware of and decrease the ways in which they may act as barriers, SWD may be more likely to contact faculty and utilize needed accommodations. Similar programs and education could also be targeted at college administrators and students without disabilities. In addition to being aware of and decreasing barriers, knowledge of these findings may help all people in college settings be more curious of SWD's experiences and simply ask what barriers might be standing in their way of succeeding in college. Finally, educating SWD in regards to these findings may help them be able to put language to their experience and better advocate for useful accommodations even in the face of barriers.

Study Limitations

Although the principle investigator elicited involvement from professionals and researchers with a background and knowledge of disability support issue, SWD were not directly involved in designing and conducting this study. This limitation was partially addressed by utilizing validity checks with the participants. This allowed the principle investigator to better ensure that the identified themes matched the intended meanings of the participants. Still, participation from SWD in designing and conducting the study may have brought insight and lived-in-experience to the study.

Some limitations may also be present in the procedure for conducting and analyzing interviews. The primary investigator conducted all of the interviews, analyzed the interviews, and generated themes. Although it might be argued that not involving more researchers in data

collection and analyzing may have led to more subjective and biased findings, attempts were made to increase the validity of the results. Throughout the research process the primary investigator made a concerted effort to explore and be honest concerning personal beliefs and biases. During interviews, the primary investigator interpreted and formed meanings from what the participants reported. Effort was then made to articulate those interpreted meanings back to the participants to make sure they matched the participants' intended meanings. In addition, an auditor, who had experience both with disability research and clinical practice, reviewed the integrity of the analyzing process. The auditor also provided expert opinion concerning the identified themes. After themes were identified, all themes were then emailed to the participants to illicit feedback and ensure the participants were being accurately represented.

All of the participants for this study came from one large, private, religious university. A common argument against qualitative methods is that the results are not generalizable. This argument often comes in large part to the typically small number of participants and non-representativeness of the larger population. While the ultimate goal of qualitative methods is not to achieve generalizable results; research on barriers to accommodation use could be expanded and enriched by future research with populations of greater variation.

The sub-theme of not being disabled enough seemed to be more dependent upon disability type than the rest of the identified themes and sub-themes. This sub-theme seemed to be primarily endorsed by participants with emotional or learning disabilities, rather than physical disabilities. This suggests that there may be other instances in which barriers to accommodation use is dependent upon disability type. Although most of the identified themes seemed to be supported broadly, regardless of disability type, one limitation of this study is that there wasn't a focus on looking at barriers according to specific disabilities, which could have provided greater insight and specificity regarding disability type.

This study attempted to improve upon past research by sampling from a population that had specifically been identified as having been approved for accommodations and then not having used one or more of those accommodations. While this may be an improvement over past studies, it still leaves out a population of SWD that may likely be facing barriers to accommodation use. A study by Wagner et al. (2005) found that fewer than half of SWD were registered with DSS. The current study only interviewed SWD that had registered with DSS. As a result one limitation is that this study did not capture the experiences of SWD that were not registered with DSS.

Future Research

This study attempted to add to the literature and provide useful information regarding barriers to accommodation use for SWD. By interviewing students who have specifically been identified as not using at least one of their approved accommodations, this study benefited from the experiences of this unique population. Since this was the first study to utilize this population, further research utilizing this unique population of students could validate and add to the findings of this study. But as previously mentioned as a limitation, this study only interviewed participants who registered with DSS. Potentially rich information regarding barriers to accommodation use could be gained from using a population of SWD who are not registered with DSS. This potential research could reveal barriers that simply are not part of the experience of students that are aware of and have used DSS.

This study also suggests benefit in looking at barriers to accommodation use with more complexity and specificity. Future research might possibly focus on gaining more specificity in determining when accommodation use would be beneficial, and when the accommodations are truly not needed, or even detrimental. This research may prove difficult as it would require research to take into account more contextual factors, variation within disability type, fluctuation

of condition of disability, classes, accommodation effectiveness, future plans and aspirations, and countless other contextual factors. Although this type of research may be difficult, it could potentially provide DSS providers and SWD invaluable information in helping make decisions regarding if and when to utilize accommodations.

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APPENDIX A

Semi-Structured Guiding Questions

Will you please describe your overall experience at college?

How has your disability affected your experience at college?

Can you describe your experiences with contacting DSS and requesting accommodations?

What parts of this process were helpful or useful?

What parts of this process were not helpful or useful?

How have your experiences with faculty members been?

How have your experiences with other students been?

How have your experiences with DSS staff been?

Can you describe a specific experience where you felt like you didn't have access to services or accommodations that would have been helpful in your education?

I'm curious about your experience with getting approved for accommodations and then not using one or more of those accommodations. Can you describe this experience for me?

Why do you think other students might not seek out or use accommodations?

If you were in charge of DSS at the college, what would you do differently?

What would you do the same?

What advice would you give to a student with a similar disability, concerning accommodations and services at college?

What question should I have asked, but didn't?

What has this interview experience been like for you?

APPENDIX B

Consent to be a Research Subject

Introduction

This research study is being conducted by Michael Lyman (a graduate student) and Mark Beecher Ph.D. at Brigham Young University to investigate possible barriers to using accommodations that college students with disabilities face. You were invited to participate because you were approved for one or more accommodation at Brigham Young University and subsequently did not use one or more of those accommodations.

Procedures

If you agree to participate in this research study, you will be asked a few demographic questions and then participate in a one-on-one interview. Demographic questions will include gender, age, year and semester in college, major, semester they first contacted disability support services, # of semesters they requested accommodations, what accommodations they did not use, and disability type. The interview will consist of questions that relate to your experiences with your disability and accommodations in college. Interviews will be conducted face to face or over the phone. Phone interviews will be used if you are geographically distant from Brigham Young University. These measures are not lengthy, and are expected to take approximately 45-90 minutes to complete. Interviews will be audio-taped in order to increase accuracy. After all of the interviews have been reviewed, overall themes that were identified from all the interviews will be emailed to you to give you a chance to review and respond to whether the identified themes match your experiences and intended meanings.

Risks/Discomforts

There are minimal risks for participation in this study. You may, however, feel some discomfort when answering questions about your disability and your experience at college. The researchers will be sensitive to those who may become uncomfortable.

Benefits

While there will be no direct benefits to you, it is hoped that the information obtained through this study will be of help to both students with disabilities and disability support services staff in identifying and eliminating barriers to accommodation use.

Confidentiality

The audio recordings will be stored on a password protected computer and only the researchers will have access. The recordings will then be transcribed by the researchers, with all identifying information (i.e. names, towns, school names, etc.) being removed or changed. Once the research is completed and written up, all audio recordings and all transcripts on the computer will be erased. The researchers will keep hardcopies of the cleaned transcripts for seven years in a locked storage cabinet in Mark Beecher's office.

Compensation

You will receive \$40 dollars for participation after the interview is completed.

Participation

Participation in this research study is voluntary. You are free to discontinue your participation at any time. There will be no repercussions to you should you decide not to participate or to withdraw prior to completion.

Questions about the Research

If you have questions regarding this study, you may contact Michael Lyman at (817) 688-9622 or via email at michael_lyman@byu.edu.

You may also contact Mark Beecher at (801) 422-3035 or via email at mark_beecher@byu.edu.

Questions about Your Rights as Research Participants

If you have questions regarding your rights as a research participant contact IRB Administrator at (801) 422-1461; A-285 ASB, Brigham Young University, Provo, UT 84602; irb@byu.edu.

Statement of Consent

I have read, understood, and received a copy of the above consent and desire of my own free will to participate in this study.

Name (Printed): _____ Signature: _____ Date: _____