Exploring Barriers and Strengths of Students with Disabilities: A Case Study of a Mid-Western Regional Campus

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The purpose of this case study research project was to explore the perceptions of social and educational experiences, barriers to success, and identification of solutions to obstacles as experienced by college students with disabilities attending a regional university campus. Two major research questions were explored: 1. What are the experiences and perceptions of college students with disabilities in higher education? 2. What modifications, adjustments, and/or implementations do students with disabilities attending higher education institutions perceive could potentially aid in their success? The results indicated that meaningful relationships with student affairs staff and faculty were of primary importance-especially in connection to feelings of belongingness and acceptance. Other findings pointed to the importance of clear policies for classroom accommodations and faculty knowledge about specific disabilities and effective support strategies. Lastly, the study generated concrete recommendations for faculty and staff to improve academic experiences for students with disabilities in higher education. Future research related to the study is also suggested.

This study aimed to explore academic success, social engagement, and potential educational solutions as related to students with disabilities. The American Disability Association (2009) defines a disability as "a person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such a disability" (para. 2). The Disability Statistics Annual Report concluded that 12.8% of the U.S. population has a disability and that the number of persons with disabilities increases every year (Institute on Disability, 2017). According to the National Longitudinal Transition Study 2 (Sanford et al., 2011), only one third of college students with disabilities will graduate from a 4-year university within 8 years. The same study also advocated that students with varying disabilities can struggle with executive functioning, problem solving, and social dynamics needed to be successful in college.

The increase of the prevalence of disabilities requires a call to action for colleges and universities to provide the most inclusive academic experience for college students with disabilities.

The Centers for Disease Control and Prevention (2017) categorize disabilities into three domains: impairment of physical or mental functioning, activity limitation (physical and cognitive), and restriction of participation in normal daily activities. In connection with these domains, the students chosen to participate in the study represented varying types of disabilities, including cognitive, mental, and physical categories. The World Health Organization (2018) defines disability impairments as "a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. Disability is thus not just a health problem" (para. 1). This study aimed to embrace the World Health Organization's approach to understanding disability limitations as a comprehensive topic. The study used a case study approach that was not limited to academic and accommodation issues, but also explored social, academic, and emotional dynamics of the student experience. There were two major research questions of focus in the study:

1. What are the experiences and perceptions of college students with disabilities in higher education?
2. What modifications, adjustments, and/or implementations do students with disabilities attending higher education perceive could potentially aid in their success?

The study employed semi-structured, in-person interviews with approximately 20 relevant questions to support these two research questions. A case study design was chosen for this research project. A small sample size of three participants (students with varying disabilities) were chosen through a purposive sampling method. The first rationale for this chosen design was that a personal, in-depth process was required to understand specific experiences of the participants. Secondly, the participants chosen for the study experienced physical, cognitive, and developmental disabilities; it was important to understand the unique experiences of each student's disability. Lastly, a case study design was appropriate to gain a more comprehensive understanding of all aspects of

student life, including social, emotional, and recreational experiences, as opposed to merely investigating academic barriers. In order to learn more about these dynamics, personal reflections and storytelling were encouraged to support richer discussions. A small sample size allowed for more time to engage in deeper conversations with the participants. A semi-structured, in-person interview method guided the conversations and allowed participants to expand on pertinent themes. Each participant was interviewed individually to maintain confidentiality and allow for a safe-feeling environment for participants to openly share their experiences and reflections.

The study also serves as a template for future studies of a larger sample size. Future studies have the potential to contribute to policy changes and the development of more creative programming for student accommodations and campus programming. On a broader scale, this study also seeks to contribute to the body of knowledge regarding societal normalcy and the expectations such notions convey to people who are disabled or labeled with a disability. Greater understanding of how normalcy impacts the lives of people with disabilities also has the potential to raise consciousness for practical and theoretical implications for society at large.

This paper will provide the following sections: an overview of the literature concerning data and barriers concerning college students with disabilities, a description of the methodology utilized in the study, a synopsis of findings associated with the research questions, and a discussion about recommendations and potential future studies associated with students and disabilities.

Literature Review

This study aims to understand barriers and life experiences of college students with disabilities. In order to better understand these issues, it is important to understand the micro and macro dynamics involved with the population of focus. This literature review explores definitions of disabilities and accommodations pertinent to this study. The literature review also features research studies about specific barriers and pertinent experiences of college students with disabilities. These studies reflect similar disabilities of the participants of this study, including intellectual, cognitive, physical, and emotional disabilities. Lastly, the literature review

features examples of model university programs and services for college students with disabilities.

Policies Associated with Academic Disabilities

There are significant, historical policy developments that have impacted college students with disabilities. Various policies include the IDEA Act, the Americans with Disabilities Act, the Rehabilitation Act of 1973, and the No Child Left Behind Act (which was amended to the Every Student Succeeds Act). The Individual with Disabilities Education Act (previously known as the Education of Handicapped Children Law) is a law that was passed in 1990, which made free public education available to children with disabilities throughout the nation. The act authorizes formula grants for early intervention and special education and discretionary grants to support higher education and non-profit organizations.

The Americans with Disabilities Act (n.d.), passed in 1990, which provides protection against discrimination of state and local government services, programs, and activities including public schools regardless of whether they receive Federal financial assistance. The Rehabilitation Act of 1973, Section 504, provides protections for individuals with disabilities from discrimination under any program or service that receives Federal financial assistance (U.S. Department of Education, 2012).

Lastly, the No Child Left Behind Act, passed in 2002, is another policy that directly impacts students with disabilities. The law focuses primarily on elementary and secondary age students; however, the act requires that students must be assessed and provided adaptations in accordance with the IDEA Act. The law was amended in 2015 to the Every Student Succeeds Act. The new law gives states more control to develop academic standards for students.

University faculty and staff are required to adhere to the civil rights and legal protections of students with disabilities. It is also important for faculty and staff to be educated on historical policies, amendments of policies, and legislative initiatives. In order to meet the needs of college students with disabilities, it is crucial to understand student needs from a micro and macro perspective. For example, assessing and implementing effective academic accommodations is crucial for student success, yet encouraging students to be self-determined to navigate their own educational and occupational paths is equally important.

Barriers and College Students with Disabilities

It has been noted that students with disabilities experience a high level of overwhelmed feelings, which result in low retention and graduation rates (Getzel, Stodden, & Briel, 2001; Wille-Gregory, Graham, & Hughes, 1995). Due to the increase of the prevalence of college students with disabilities, it is important to understand specific barriers and stressors that impede a successful post-secondary experience. The following section will discuss pertinent studies related to services and barriers experienced by college students with disabilities.

A significant study by Lyman et al. (2016) investigated reasons that post-secondary education students with disabilities did not use accommodations. A research team from Brigham Young University and the San Juan Counseling Center of Utah conducted 16 individual, semi-structured interviews at a large, private university who were receiving accommodations from the campus disability resource office. The study concluded the following themes from the participant interviews: self-accommodation was important, students did not want to be singled out or appear different than their peers, students were unclear if they had a "real disability" legitimizing the need to receive services, the procedures for obtaining accommodations were stressful and burdensome, and the fear of stigma or long-lasting ramifications of having a disability marked on a college record.

A significant study conducted by Brown (2017) investigated types of accommodations for Autistic Spectrum Disorder provided by university disability offices throughout the United States. Survey instruments were distributed to 1,245 individuals and had a 41% return rate. The study concluded that 94% of student disability service centers had one or more students with Autistic Spectrum Disorder on their campus. For these students, sensory and social accommodations are provided less frequently, although 39% of campus disability resource offices offer single residence hall rooms as an accommodation, 27% of campuses have a disability-focused student organization, and 27% offer peer mentoring programs. The study also concluded that peer mentoring was the strongest predictor of institutional support for students with Autistic Spectrum Disorder, and disability resource centers with peer mentoring services were three times more likely to have specific services for Autistic Spectrum Disorder.

The Virginia Commonwealth University Rehabilitation and Research and Training Center conducted a study with a Disability Support Services

Office through the testing of a supportive education model. The model provided intensive educational supports for college students with Attention Deficit Disorder and learning disabilities. The study focused on a cohort of 26 students. Academic specialists assessed and developed an individual specialized learning plan for each student. Students were divided into two groups, one group titled "frequent" and another titled "infrequent." The frequent group attended regular meetings with the support specialist, and the infrequent group only met once or twice with the specialist. The findings indicated that there was a difference in grade point averages between the two groups, with the frequent group having a 3.03 average, and the infrequent group a 2.29 average. The frequent and infrequent groups had 8 out of 11 members progress to a "good standing" in their course of study; however, in the infrequent group, four students were placed on academic warning during the course of the semester (Getzel, McManus, & Briel, 2004).

Cole and Cawthon (2015) conducted a study to explore academic success of students who disclose learning disabilities to faculty, institutions, or disability resource offices compared to students who did not disclose their disabilities. The findings indicated that students who did not disclose their disability had lower levels of self-determination, did not have a clear understanding about accommodations, viewed disability as a stigma, believed that accommodations would not be helpful, and were concerned that disability status would be perceived negatively by peers. The students who disclosed their disability reported factors that encouraged them to disclose, including the demeanor of the professor, past experiences with the instructor, and whether the student viewed their disability in a negative manner. Cole and Cawthon (2015) also asked students for recommendations about services offered by disability resource offices, and the following was reported: information about accommodations should be provided to all incoming students at orientation, offer campus tours for disability accommodations, have current students provide testimonials at the orientations, provide clear step-by-step instructions on how to access accommodations, and provide more information and training for faculty on disabilities.

The connection between hearing disabilities and achievement scores was studied by Qi and Mitchell (2012) in a landmark study which evaluated five cohorts of K-12 students with hearing disabilities from 1974-2003 in connection to achievement scores in math and reading. Their

findings indicated that the median performance never exceeded the 4th grade level and in mathematic problem solving, and by age 17 performance was at a sixth-grade equivalency. These results are important for university employees to understand, as many students with hearing disabilities may be entering college with insufficient academic preparation.

Hong (2015) conducted a qualitative study with 16 college students with diverse disabilities over a 10-week period. Reflective journaling was used to understand anecdotal experiences. The results indicated four major frustrations for the participants: faculty perceptions, fit of advisors, college stressors, and the quality of support services. Participants of this study verbalized other problematic situations, such as the need to hide disabilities from others.

A Delphi survey method to investigate perceptions of the needs of college with students with psychiatric disabilities by Kupferman and Shultz (2015) investigated both disability service professionals and students with psychiatric disabilities. They concluded that the two groups had different views of important competencies. The professionals prioritized having knowledge of disability disclosure hesitations; abilities to know how to help students disclose their psychiatric disability to faculty, staff and peers; knowledge of natural supports and *universal design strategies*; and knowledge about clinical issues and psychiatric resources. The students reported the most crucial competencies as helping students with psychiatric disabilities develop natural supports, assistance with employment and independent living, and the ability to implement supported education strategies.

Noteworthy Post-Secondary Programs and Initiatives for Students with Disabilities

As noted from the barriers reported by students in this literature review, university faculty, advisors, and disability services are a crucial aspect of student success. The following section will highlight various programs and initiatives in the United States that focus on effective training, education, and advocacy for students with disabilities.

The National Youth Transition Center (2017) is a national organization of 45 organizations that empower young people with disabilities in the areas of post-secondary education and employment. Various program include career counseling, work-readiness training,

mentoring and internships, personal development and leadership training, and family education and support.

The DREAM Organization (Disability Rights, Education, Activism, and Mentoring, 2011) is a national organization supported by the National Center for College Students with Disabilities. The aim of the organization is to serve college students with any disability, who many times have been marginalized. The organization advocates for disability culture and serves as an on-line, virtual community for students to engage in peer social support.

The Disability Rights and Education Fund (n.d.), developed in 1979, is a national civil rights law and policy center for individuals with disabilities. The organization provides legal advocacy, training, education, and public policy and legislative action. The organization provides reports and briefs about pertinent legal and policy matters and works with member of congress on disability rights cases.

One crucial initiative was the development of AHEAD (Association of Higher Education and Disability, n.d.). The mission of this organization is to provide training services to international educational professionals in regard to assisting students with disabilities. The areas of training content include the following: instruction in college service delivery evaluation, model policy development, and professional training.

Numerous universities have prototypical programs for students with disabilities. For example, The University of North Carolina system has implemented a *universal design for learning* that uses alternative educational tools to help students succeed in mainstream classrooms. Some examples include web-based design, varied instructional methods, classroom structural changes, and a community approach to learning (Scott, McGuire, & Shaw, 2001). There are a few universities that exclusively admit students with disabilities onto their campuses, for example, Landmark College in Vermont and Beacon College in Florida (Beacon College, n.d.).

Various universities are acclaimed for their extensive work with the deaf and hearing disability population. For example, Howard College houses the Southwest Collegiate Institute of the Deaf, which is a barrier free campus that has adapted ASL as the primary form of communication. Rochester Institute of Technology houses the National Institute of the Deaf. Roughly 1,300 out of the 14,000 enrolled in the university are deaf. The school offers comprehensive services such as interpreting, note-taking, captioning, and tutoring. The University of Wisconsin-Milwaukee has around 1,000 students that utilize ASL. The university allows each hearing

impaired student to meet with the Accessibility Resource Center and Verified Individual Services and Accommodations (Best Colleges, 2018).

There are additional universities that provide noteworthy services to their students with disabilities. For example, Alabama-Samford University offers a separate application process for students with disabilities. Indiana-Anderson University utilizes the Bridges Program, which provides an extra layer of support for students with disabilities during their first semester. New Jersey Centenary College utilizes the Academic Bridges to Learning Program along with the Summer Transition and Enrichment Program to help with the transition period between high school and college. Another unique approach to student success is offered through New York SUNY Empire College's Center for Distance Learning, where students with disabilities have the option of completing their degree completely online.

This literature review focused on the definition of terms and policies pertaining to disabilities, research studies about academic barriers and college students, and an overview of notable university programs for students with disabilities. The themes that emerged in the literature review were the following: students with disabilities are more successful when policies and procedures are clear about the accommodation process, students with disabilities have a significant amount of apprehension about feeling "different" than their peers and being singled out and also experience anxiety approaching faculty and disability support staff for help, a consistent and supportive relationship with university faculty and staff encourages disclosure about disabilities, and consistent use of accommodations and services increases academic success.

Methodology

This study utilized an exploratory, case study approach to investigate experiences and perceptions of college students with disabilities in higher education. The study aimed to understand barriers, challenges, strengths, and potential interventions that could enhance the academic and social experience of college students with disabilities.

A case study method explores the in-depth uniqueness and complexity about a particular system in a real-life setting – including micro and macro systems with a framework that explores the phenomenon from multiple perspectives (Simons, 2009). Case Study research is more suiting with specific populations compared to other methods. Yin (2009) considers the application of case study research when "how, why, and when"

questions are being posed, when there is little control by the researcher over the events being studied, and when the focus is about a contemporary issue. Also, the strengths of case study research include being able to study a phenomenon in a natural setting where the nature of the phenomenon can be studied in a comprehensive manner (Meredith, 1998). Rowley (2002) posits that specific criteria should be analyzed before choosing a research method: The types of questions to be answered, the extent of control over behavioral events, and the degree of focus on contemporary events. During the preparation stage of the study various qualitative approaches were considered, including: focus groups, qualitative survey research, and a case study approach. Focus groups posed a risk to participants' emotional safety and need for confidentiality. The literature review of this study concluded that personal disclosures about disabilities can be a highly stressful experience-especially with peers and faculty. In order to minimize this risk, in-depth individual interviews were chosen as a preferred interview style. Traditional survey research could have neglected the potential for a holistic assessment and the capacity to read non-verbal language and subtle nuances of interactions. Last of all, due to the cognitive, mental and physical disabilities of the participants, it seemed prudent that the researcher would be available in person to support any issues that could have surfaced in the interviews, such as anxiety/ intense emotionality or communication barriers.

A case study approach was chosen in connection to the recommendations of scholars previously mentioned in this section. Other factors that encouraged a case study approach included: the engagement of a unique and sensitive participant culture, the relevance of the method to the research questions/ goals of the study and the intent to explore a contemporary, multifaceted phenomenon.

In reference to Yin, questions were presented about "how" college students with disabilities cope with academic and social stressors and self-perceptions of "why" they react to various dynamics in their academic and environment. In connection to Meredith's ideas, this study was conducted in the natural environment of the participants (the college campus in which they attend) and explored social and academic experiences from a holistic perspective - as one of the goals of the study was to challenge society to view students with disabilities from a system's perspective. Crowley expressed that case study research should be chosen in connection to the types of questions utilized in a study. Due to the nature of the diverse and

sensitive interpersonal questions of the study, an in-depth case study approach was appropriate.

A "building block" case study approach was applied to the study. A building block case study approach analyzes the different sub-types of a phenomenon to contribute to a more comprehensive theory (George and Bennett, 2003). The components studied included diverse students with varying disabilities and the ecological dynamics that impacted their college experience. The study is a call to action for stakeholders such as students, faculty, university staff, and society at large to understand the needs of college students with disabilities through a more comprehensive and inclusive lens.

System's theory was employed as a guiding principle in this study. System's theory focuses on three main principles: wholeness, relationships, and homeostasis (Zastrow, 2009). The goals of the study focused on understanding the whole experience of college students with disabilities; therefore exploring the impact of university systems, relationships, and life balance coincides with the principles of system's theory. The concept of inclusion was also central to the study; particularly concerning strengths and barriers that contribute to inclusive learning and social experiences.

Participants

Approval was granted by the Institutional Review Board for this study. Students were invited to participate in the study via university email. Snowball sampling was also used, as students were invited to ask peers who would qualify to participate in the study. The main qualification for participants was enrollment in university disability services, which indicated that they had a disability that met the criteria established by the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1974. There were no restrictions about academic standing or major, only that students were receiving disability services from the university.

During the recruitment process, the scope and goals of the project, ethical guidelines, and consent forms to the potential participants were presented. The students were given a few weeks to make a decision to participate. Due to the fact that the interview was conducted between a faculty member and student, it was important for me to avoid creating a perception of pressure for the student to participate. The participants were not currently enrolled in classes taught by the researcher. Due to the sensitivity of the interview questions and the unique role between the

participants and researcher, extra time was allotted before the study to discuss IRB requirements, research ethics and protection if human subjects.

A total of 15 students were invited to participate in the study. There were 10 women and 5 men invited to participate. Five agreed to participate—three females and two males. Three females followed through with interviews. Although the sample size was smaller than anticipated, the study continued due to the fact that case study research does not require a specific sample size (Starman, 2013) and is uniquely tailored to suit the needs of the phenomenon studied. One participant had both physical and psychiatric disabilities: pain disorder and obesity, along with anxiety and bi-polar disorder. Another participant had both psychiatric and cognitive disabilities: attention deficit disorder along with language processing disorder. A third participant was hearing impaired.

Although the majority of research methods, both qualitative and quantitative, favor a larger sample size, a small sample was befitting to this study, as it met the criteria for case study research as discussed by experts in the field of social research. Starman (2013) discussed the issue of sample size as related to case study research as the following "A case study is usually a study of a single case or a small number of cases. The idea of representative sampling and statistical generalizations to a wider population should be rejected, and analytical induction should be chosen instead" (p. 35). Gomm et al. (2000) postulates that a case study approach could utilize one or a few samples and does not focus on pre-determined ideas, yet on shaping the literature about the phenomenon. Finally, case study research does not aim to generalize data and findings to a population, yet aspires to provide a multidimensional and holistic approach to study a contemporary phenomenon (Bryman and Bell, 2003).

Setting and Procedure

The study was conducted at a small, regional college campus in the Midwest. The students are primarily Caucasian, from poor or working-class families, and there is a large percentage of first generation students. The campus is on the geographical edge of Appalachia and serves many students from rural areas. The university offers associate, bachelor, and master's degrees. The campus is a commuter campus and does not have student housing on site; however, it offers a wide variety of student organizations, activities, and support services.

The participants were invited to attend an individual, confidential meeting in a faculty office. The environment was casual and familiar to the participants. A written copy of the semi-structured survey was employed to guide the interview and the participants were asked to sign a consent form before the interview began. The interviews were audio-recorded, with permission of the participants, and lasted approximately an hour each. I also took written notes to record reflections during the interview process.

Survey Instrument

The instrument was developed to explore responses related to the major research questions. The instrument was a set of written semi-structured interview questions. The first section of the instrument included demographic background information such as ethnicity, gender, identified disability, previous educational experiences, and utilization of disability services. The second section of the instrument utilized 20 interview questions to support the first research question. The questions focused on experiences and perceptions related to managing a disability during the college experience. The questions focused on social experiences, accommodation or disability service experiences, coping strategies, support systems, and perceptions of individual strengths and barriers. The third section of the instrument utilized 9 questions that supported the second research question of the study. These questions explored recommendations to improve college experiences for students with disabilities. The questions inquired about effective strategies, interventions, support services, and faculty and staff dynamics to support academic success.

The interview questions were open-ended and close-ended. Semi-structured interviews are a method to allow the interviewer to allow unanticipated answers to emerge (Creswell, 2009). Also, a semi-structured method allows the researcher to apply some direction in the interview process. This method was also chosen due to the nature of the content of the study. With consideration to interviewing individuals with disabilities, a clear and semi-structured interview format seemed most appropriate to prevent potential anxiety due to learning or processing barriers. Also, participants may have been apprehensive to disclose emotional and personal issues, therefore guiding the major content points with an open and flexible format was viewed as a logical approach.

Findings and Applications

Analysis Process

The interview responses provided insight into experiences of the participants. Van Manen (1990) discussed three methods for reflecting on essential themes: the holistic or sententious approach, the selective or highlighting approach, and the detailed line-by-line approach. The holistic or sententious approach was employed in this study to focus on the transcript as a whole unit (Van Manen, 1990).

Data analysis was conducted in several steps. Participant responses were recorded verbatim from the interview audio recordings. Next, the transcriptions of each interview were analyzed to capture an overall essence of student experiences, including written reflections of the researcher. The next step included taking a blank survey questionnaire and writing key points of participant responses, labeled by each participant identification number (1-3). The content areas that elicited the highest number of similar responses were noted. Recurring words and topics were coded, condensed, and documented as themes. The significant categories and quotes are presented in the subsequent section.

Significant Themes

The following section will summarize relevant themes pertaining to the research questions. The following themes were comprised of participant responses that shared the most analogous responses in the following categories of college student experiences: socialization, university services and classroom accommodations, coping strategies and support systems, and self-perception of individual strengths and barriers. Various quotes were also included to illustrate important content that was associated with the themes categorized under the two major research questions of the study: "What are the experiences and perceptions of college students with disabilities in higher education?" and, "What modifications, adjustments, and/or implementations do students with disabilities attending institutions of higher education perceive could potentially aid in their success?" In regard to Research Question 1, the following themes emerged:

Social experiences. Students with disabilities can feel different than their peers due to different learning styles. One student stated that "It is hard for people to see your strengths over your disability." The student with a hearing impairment stated, "During class I have to pay attention to the

teachers and interpreters, where other students just have to listen to the teacher." She also stated, "I had to work to interact with friends and family. It took a lot to get used to, because I had to focus on me and then I had to focus on the people I wanted to talk with." Students with disabilities can feel self-consciousness in front of peers about accessing and using classroom accommodations. For example, one student reported, "Everyone else takes tests in class, and then everyone wonders where you were during the test." Gender was also discussed as a factor of consideration by one student: "The actual problems of disability are universal, but it is harder for women to be seen as courageous through it instead of whining."

Classroom situations can be awkward with peers. For example, one student explained that if a student peer is hired as a note-taker and they do not do the job well, a student with a disability may have to request a new note taker, which can cause a strain on the peer relationship. The issue of being able to trust peers was mentioned: "Being able to find one person you trust in school is really important." Students with disabilities can feel self-consciousness in front of peers about accessing and using classroom accommodations. For example, one student reported, "Everyone else takes tests in class, and then everyone wonders where you were during the test."

University disability services and classroom accommodation experiences. The most helpful university intervention services and accommodations mentioned included the following: faculty understanding about accommodations and specific disabilities, regular communication about classroom accommodations, and support services in general. One specific example included the importance of communicating with new students about the process of obtaining classroom accommodations. Specific accommodations were communicated as helpful: extended time on tests, the use of recording pens, taking tests in a testing center, and faculty to allow flexible attendance.

The participants also discussed accommodation situations that were unhelpful. The following examples were noted: the need to request accommodation services multiple times if volunteer or paid note takers or interpreters were unhelpful. Experiences with professors vary from class to class, as some are more supportive than others. All three participants verbalized some apprehension around communication with faculty about classroom accommodations. Specific examples of unhelpful actions also included a lack of skillful interpreters, ambiguity of how accommodations would be implemented in the classroom, and inefficient note takers.

Coping strategies and support systems. All three of the students verbalized that they viewed a positive relationship with faculty as one of the most important support systems for academic success. All three of the students reported that their current university student disabilities office was generally supportive and met their needs. Specific references were made to ease of getting into appointments, feeling cared for and warmth of the staff, attending a smaller campus enabled a higher comfort level to manage services, and the staff communicating accommodations to faculty in an efficient manner. Other recommendations were noted: one student reported that her hearing disability enabled her to form positive peer relationships with students who were not deaf, because they asked her to teach them sign language and thought that "Learning words was neat." Two students reported that parents were their greatest support system and that there was a history of parental advocacy from a young age in both cases. Two students reported that they became more comfortable with classroom peers when their peers learned more about their disability and they had a mentor or "buddy system." All three participants reported involvement in campus organizations and activities, but attendance was an issue due to busy schedules and time management.

Perceptions of individual strengths to manage disabilities in college. All of the participants shared reflections around the importance of supportive faculty and peer relationships. This theme initiated the greatest amount of reflective sharing in comparison to other topics. In regard to faculty relationships, open communication, a supportive relationship, and understanding of specific disabilities were regarding as helpful to build positive self-perception. Peers relationships were also noted as a priority to the participants. Sharing details and experiences of ones disability to peers helped with relationship building. One student explained that teaching a peer how to use sign language helped her feel more accepted and useful. One participant said that she felt alleviation of anxiety when she found accommodations that worked for her during class; as this gave her more time to focus on connecting with her peers. Intrapersonal experiences such as seeing progress over time, obtaining other credentials while attending college, and reflecting on previous accomplishments were also noted to improve confidence. All of the participants verbalized that a sense of acceptance about their disability contributed to positive peer relationships and higher self-esteem.

Reported barriers in managing disabilities in college. Common themes were reported about academic barriers, including a lack of faculty understanding about disabilities and accommodations, unclear policies and procedures, especially when during the admissions process, the perception of negative or unsupportive faculty communication around accommodations and a general feeling of being different than peers. One student told a story of a faculty member talking about her disability in front of the whole class, another student discussed how a faculty member rolled his eyes at her when she tried to explain an accommodation, and a third participant discussed how she felt confused and isolated. Participants also discussed how larger university systems can be confusing, such as unclear web sites and requesting accommodations upon admission to the university. Two of the participants discussed anxiety about bridging high school and college life.

The study also aimed to acquire specific student recommendations in the areas of faculty and peer interactions, disability services and staff and university policies and procedures. The following sections report student recommendations about the aforementioned categories.

Recommendations for faculty. All of the participants reported that faculty relationships were fundamental to academic success. Common responses included the need for faculty knowledge about specific disabilities and accommodations and the development of supportive student-faculty relationships. For example, one student discussed how she never knew the exact amount of extra time she had to take a test and felt uncomfortable asking the instructor, because she did not want to appear demanding. She further explained that an accommodation letter typically says "Extended time on tests" but does not indicate specific time frames. This ambiguity created a high level of apprehension for the student.

It is important for faculty members to understand the unique culture with each disability. One student gave this specific example: "I would tell faculty we all learn differently. Some people are temporarily able-bodied persons and others have special needs. I would tell them not to feel sorry for them, but to accept how they learn. So, if a student is in a wheelchair, maybe they would be late because they have to do double the work. They can't just walk to class." Other recommendations for faculty included: talking with students individually about their needs before class starts to better understand learning styles, increase discussions about certain types of disabilities and the impact of the disability on academic

success, increase inclusion and encourage students to speak openly about their disabilities in class for the benefit of all students, utilize personal experiences and stories as examples to help different types of learners remember the material, and to work on building deeper relationships with students. One student discussed the importance of faculty support: "Student support starts with instructors; they need to have a supportive environment in class and students need to feel comfortable enough. They do not need to know all the answers, but need to be empathetic and non-judging." This student discussed a negative experience with an instructor who became aware of her mental health diagnosis and questioned her on what medications she was on and if she was a danger to others. These questions created a feeling of stigmatization for the student and impacted her comfort level in the classroom.

One student offered a specific recommendation about physical disabilities: "For physical disabilities, make sure there are seats without arms, and all doors should have an automatic open. If someone has mental health or anxiety disabilities, teach them to use skills like reading class schedules on doors, have a de-stress room, and have documentation for accessible restrooms." She also described an experience where she was new to college and became panicked when looking for her classrooms. This triggered a panic attack and was a daunting experience at the beginning of her college experience. This experience enabled her to reflect on how a more comprehensive orientation to the campus would have been helpful.

Recommendations for university student support services procedures. The researcher also asked for specific recommendations regarding university disability offices and procedures. All of the participants reiterated the importance for faculty to understand about disabilities and accommodations. Suggestions included that university disability support offices should conduct faculty training on specific disabilities and accommodations, conduct student focus groups about disability experiences, and develop clear communication processes among the disabilities office, faculty and students. The transition period between high school and college was reported to be stressful-especially in regard to obtaining and implementing new classroom accommodations, therefore thorough student orientations that focus on disability resources were suggested. The participants verbalized that peer relationships were highly valued in connection to student success. It was suggested that student disability services could create support groups for students with disabilities,

develop inclusive student organizations, and provide mentoring opportunities. Transparent and interconnected procedures and policies were advantageous to the participants of the study. Comprehensive bridge programs from high school to college could help students understand how to navigate accommodations in higher education. Additional ideas included a university orientation to include more specific strategies to support students with disabilities. For example, orientation could include an extra day or session for students with disabilities to explore the physical layout of the campus. This would give an opportunity ahead of time to locate classrooms, elevators, testing centers, and student services offices. Research indicates that consistent contact with student disabilities services enhances academic success. Student disability offices could request multiple meetings with the students during the first semester to support student needs, instead of only one meeting to establish classroom accommodations.

It was noted that asking peers to help with the facilitation of classroom accommodations (such as notetaking or interpreting) could be awkward if they cannot perform the task effectively, which created anxiety about the status of friendships. Other ideas suggested were to start with rotating student helpers to be tried out without the sense of them failing in the task. Staff could help coach students with disabilities on assertiveness and communication skills with peers to help prevent stressful peer interactions. Lastly, student disabilities offices could offer regular trainings to faculty and staff about diagnostic criteria of disabilities, skill building on the implementation of classroom accommodations. Finally, funding and grant opportunities for students with disabilities should be investigated on a regular basis.

Additional Reflections

One advantage of a case study approach is the ability to observe communication styles, such as verbal and non-verbal communication, affect, and engagement style. Another benefit of this approach is the ability to expand on pertinent themes with greater profundity during the interview process. The following section will outline observations of communication and will discuss particular themes that inspired the most passionate and engaging participant responses.

Each interview lasted approximately an hour, and the pace moved at a natural speed. The students all seemed eager to discuss their experiences. They had an overall positive demeanor, and one student

verbalized that she was "So excited to talk about this stuff." There was no anxiety noted in the body language or communication style of the participants. There are a few possibilities for this comfort level. One possibility is that the campus is small and the students are acquainted with most of the faculty. Another possibility is that students were motivated to talk about their experiences, as indicated by the fact that two students asked when they could read the final report of the study.

The longest conversations transpired around the themes of peer and faculty relationships. The themes of feeling different than peers and wanting to feel normalized motivated lengthy discussions. Personal stories surrounding feelings of acceptance and familiarity with peers appeared significant. For example, participants explained how the development of relationships with peers over time reduced anxiety, and how they felt more at ease discovering interventions that helped them relax in front of peers, such as using a recording pen and having proficient note-takers and interpreters.

Faculty relationships were also central to students' perceptions of success. There was an emphasis on the importance of open and welcoming faculty attitudes inside and outside of the classroom. The concept of warmth was emphasized. Specifically, there was an awareness that most faculty members have genuine concern for the students. Yet negative faculty experiences left lasting, negative impressions, such as stereotyping a student due to a disability, or the appearance of being annoyed or disconnected from students with special needs.

From a macro perspective, the implementation of clear policies and procedures among the multiple systems at a university—those influencing students, faculty, and staff—needs to be consistent and transparent. Students expressed concern when there was not a clear bridge about services between high school and college. The participants also spoke at length about the lack of clarity regarding accommodations, such as length of test taking time, attendance policies, and use of specific accommodations. In some situations, students spoke about the confusion of what constitutes a disability according to the Americans with Disabilities Act.

The above-mentioned points indicate that a lack of positive faculty, staff and peer relationships can impede learning. Ambiguous policies and procedures surrounding classroom accommodations can increase student anxiety. Also, an academic culture that promotes inclusion and supports diversity improves the overall academic experience.

Conclusion

      The number of students with disabilities in higher education continues to increase. There have been legal protections for college students with disabilities for the last few decades, such as the Americans with Disabilities Act and the Individuals with Disabilities Education Act. These laws have enabled students with disabilities to obtain services and classroom accommodations to assist with academic success. This study was not limited to solely investigating the efficacy of classroom accommodations; it aimed to incorporate a systems approach to better understand how interpersonal, academic, and systematic dynamics impacted the college experience. The study is also a call to action for universities to strengthen faculty-student relationships, implement effective teaching strategies for diverse learning styles, and promote clear and effective disability policies and procedures and to develop inclusive opportunities for student peer socialization.

      The study aimed to explore two questions. The first question inquired into students' social and academic experiences in connection to their disabilities. The second question inquired into students' recommendations to improve their academic experience by way of university disability services, faculty/staff and student interactions, peer interactions, and university processes and procedures.

      The responses to the first research question regarding academic and social experiences produced several notable themes. Student relationships with faculty were noted as central to academic success. For instance, traits such as warmth, openness, motivation to learn about disabilities, and willingness to learn about pertinent classroom accommodations were reported as important. Negative experiences with faculty were described as highly stressful. Various examples of stressful faculty experiences included perceptions of annoyance when approached about accommodations, the use of negative language or attitudes, and unclear expectations about the application of accommodations to assignments and tests.

      Peer relationships were reported as significant to the academic experience. One prominent theme was the apprehension of feeling different or singled out from non-disabled peers. Feelings were expressed about the fear of appearing lazy or entitled, and the discomfort of peers not understanding why alternative arrangements were made for tests and assignments. It was also noted that it is common for students with

disabilities to ask peers to be note takers or perform academic support functions, which adds another dimension to their socialization process.

The quality of services received by the office of disability services staff was noted as important, but was not emphasized as much as the significance of positive peer and faculty relationships. All three students in the study reported satisfaction with the university services they were currently receiving. The students focused more on systematic issues such as making transitions easier from high school to college, the desire to have disability services staff provide more training about disabilities and accommodations to faculty, and the need for consistent contact with disability services staff.

In summary, the study focused on the systems that impact academic success for students with disabilities. Notable themes were revealed in the areas of faculty, peer, and staff relationships in connection to academic success. Barriers and strengths for academic achievement were explored, and specific recommendations for faculty, staff, and university disability support services were provided.

The majority of viewpoints expressed in the literature review were similar to participant responses of this study. The parallel themes included the following: (a) students with disabilities are more successful when policies and procedures about accommodations are clear; (b) students with disabilities have anxiety surrounding feeling different and isolated from their peers, especially during classroom interactions; (c) consistent and supportive relationships with faculty and staff enhance learning; and (d) academic success improves with regular connection with disability services staff and faculty.

During the literature review process, the researcher noted that the majority of studies involved the efficacy of accommodations, evaluation of academic success in connection to student disabilities, and obstacles associated with legal issues and disability services. There were various exploratory studies connected to student disabilities in higher education, including the following: faculty and student attitudes; barriers in higher education; and relationship issues among peers, faculty, and university staff. Studies were limited that pertained to perceived student strengths, and few studies probed the assessment of student experiences from a holistic or systems approach.

Limitations of the Study

The study originally aimed to recruit 6 to 8 participants; however only three students committed to the study, although the project persisted as three unique cases had value to a case study research approach. The participant size was intended to be small on purpose, as the interviews were structured in a qualitative manner in hopes of allowing the students to feel safe to respond to an in-depth, semi-structured format. In retrospect, offering an incentive for participation or using a more personal approach to recruit students could have been beneficial. The students in the study represented unique disabilities including physical, mental, cognitive, and hearing disabilities. The study could have benefitted from exploring students with additional disabilities such as vision, the autistic spectrum, tic disorders, or intellectual disabilities. Individual interviews could have been complemented with a focus group to gain additional information, yet due to student and faculty schedules, this would have been difficult to arrange.

Recommendations for Future Research Studies

The common themes derived from the study included the importance of meaningful faculty relationships, including clear communication about accommodation issues, a sense of warmth and acceptance, and an open-door policy to discuss class assignments. One potential study could include a deeper exploration into specific teaching styles that benefit students with disabilities. Another study could examine factors contributing to student self-efficacy in connection with faculty communication. A large scale, quantitative study examining the correlation between positive faculty engagement and student retention could be beneficial. Also, a content analysis study utilizing qualitative student course evaluations could explore the efficacy of teaching styles in connection to classroom success.

Peer relationships were a central theme of this study. Future studies could explore this phenomenon in greater depth. For example, focus group research could be conducted to explore how trust and support are best established at early stages of students' academic careers. A social action study could be employed through the use of student mentors to explore social needs of students with disabilities. Lastly, students with disabilities could participate in a qualitative, reflective journaling exercise to write reflections of barriers and strengths to forming relationships with student peers throughout one academic year.

Research articles are infrequent regarding the concept of strengths and resiliency factors among college students with disabilities. The participants in the study shared valuable information about their perceived strengths. Meaningful examples included feelings of empowerment when reaching academic goals, the ability to apply creative learning techniques, social engagement through teaching peers without disabilities skills such as sign language, and the ability to transcend academic barriers. The topics of empowerment and resiliency can be expanded upon with different types of studies. A social action study could be developed to encourage students with disabilities to serve leadership or training roles on campus in connection to educating the university community on disability awareness. A focus group research study could be developed to assess feedback from students with disabilities on experiences of academic empowerment. Also, survey research could be applied to non-disabled students regarding perceptions and questions about student disabilities. The results of this feedback could contribute to campus trainings and the development of student activities that promote an inclusive learning environment. Lastly, in regard to this particular exploratory case study research study, alternative case study approaches could be employed; for example, a collective/multiple case study to compare issues of students with disabilities from diverse university campuses/cultures could be useful. Also, an explanatory case study could be used to understand specific causes of one particular academic or social problem, such as learning how specific teaching pedagogies impact college drop-out rates.

Implications for Inclusion in Higher Education

The results of this study reinforced crucial components of inclusion for college students with disabilities. Faculty need to view all students as competent and provide flexible learning opportunities for academic success. College students with disabilities should have opportunities to promote relationships with all peers. Students who do not have disabilities can grow from sharing a diverse learning environment of unique learning styles and shared human experiences. Students with disabilities should be viewed from a strength-based perspective. Universities should promote student opportunities and activities in which they can benefit socially, academically and spiritually. A student-centered culture should exist at universities, and each student should be viewed as an individual with unique learning styles

and strengths. Student self-determination should always be applied in academic and social environments.

In conclusion, all college students should be understood and encouraged through a systems perspective. Students are comprehensive individuals composed of many unique systems-including intellectual abilities, skill sets, social needs, cultural components and lived experiences. Universities have the potential to serve as models of inclusion to other institutions in society. Continued research on holistic, strength-based strategies for enhancing the college student experience is key to an inclusive university culture.

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