2021

Inclusive Environments: How Campus Mobility Effects A Sense of Belonging for the Student with a Mobility Impairment

Taylor Treece

INCLUSIVE ENVIRONMENTS: HOW CAMPUS MOBILITY EFFECTS A SENSE OF BELONGING FOR THE STUDENT WITH A MOBILITY IMPAIRMENT

A thesis

Presented to

The School of Social Sciences, Education & Business

Department of Higher Education and Student Development

Taylor University

Upland, Indiana

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Higher Education and Student Development

---

by

Taylor Treece

May 2021

Higher Education and Student Development
Taylor University
Upland, Indiana

CERTIFICATE OF APPROVAL

MASTER'S THESIS

This is to certify that the Thesis of

Taylor Jade Treece

entitled

Inclusive Environments: How Campus Mobility Effects a Sense of Belonging for the Student with a Mobility Impairment

has been approved by the Examining Committee for the thesis requirement for the

Master of Arts degree
in Higher Education and Student Development

May 2021

Scott Barrett, Ph.D. Date
Thesis Supervisor

Kelly Yordy, Ph.D. Date
Member, Thesis Hearing Committee

Tim Herrmann, Ph.D. Date
Member, Thesis Hearing Committee

Tim Herrmann, Ph.D. Date
Director, M.A. in Higher Education and Student Development

Abstract

With an increase in students with disabilities entering into a college campus, understanding their unique needs is necessary to ensure they complete their college experience. This rise in enrollment by students with disabilities is due in part to the increased supports within the K–12 schooling systems. This leaves higher education professionals unprepared to serve college students with disabilities in developing a positive sense of belonging during the transition to postsecondary education. This study explores if and how campus mobility impacts the sense of belonging for a student with a mobility impairment. This study implemented a best practices design and also phenomenological approach utilizing interviews of students at a large research-based institution located in the Midwest to accurately capture their experience. The results revealed that in order to achieve a positive student sense of belonging, institutions must provide accommodations that go beyond ADA requirements to adequately provide the physical/social inclusion wanted by students. The student interviews and best practices research indicated beneficial models that other institutions may benefit from after thoughtful consideration, adaption, and implementation of the results.

Acknowledgements

To Jeff Aupperle, thank you for believing in me throughout my time in MAHE. Thank you for pushing me when I did not believe in myself. Thank you for the many one-on-ones, handling my tears with intentionality and grace, and for always lightening up the room with a well-timed dad joke. I believe I am a better professional because of your mentorship. You seriously rock!

To MAHE faculty, thank you for your time and dedication to this program. The way you pour yourselves into each cohort is why many alumni feel equipped after graduation. I am a better writer, better presenter, and overall a better human because of your guidance. Thank you for making me excited to continue learning and serving in higher education.

To Scott Barrett, thank you for taking a chance on me to be the first student to supervise! Who would have thought our thesis meetings would move to the AEC where our conversations matched the work you now get to do at Taylor University. Thank you for your patience, time, and honesty. I'm excited to finally step into work that my thesis helped equip me to do!

To Courtney Jarrett, thank you for your mentorship during my two years in the MAHE program. Thank you for allowing me to do my second assistantship in your office and for continuing a relationship with me. Your care, tenacity, and kindness does not go unnoticed.

To Cohort XIII, we made it! Even during a pandemic, we finished strong. Thank you for your passion, commitment, and genuine care for higher education. You all made class incredibly enjoyable and I am excited to continue learning from you across the United States. To Morgan Allison, I do not have all the words to say to thank you for all the help and encouragement you have given to me over these last two years in MAHE. Thank you for being a sister from another mister and a forever friend.

Table of Contents

Chapter 1

Introduction

In a small community, a giraffe had a new home built to his family's specifications. It was a wonderful house for giraffes, with soaring ceilings and tall doorways. High windows ensured maximum light and good views while protecting the family's privacy. Narrow hallways saved valuable space without compromising convenience. One day the giraffe, working in his wood shop in the basement, happened to look out the window. Coming down the street was an elephant. "I know him," he thought. "We worked together at PTA committee. I think I'll ask him in to see my new shop." So the giraffe invited the elephant in. The elephant was delighted; he had liked working with the giraffe and looked forward to knowing him better. So he walked up to the basement door and waited for it to open. "Come in, come in", the giraffe said. Immediately they encountered a problem. While the elephant could get his head in the door, he could go no farther. "It's a good thing we made this door expandable," the giraffe said. He removed some panels to allow the elephant in. The two were happily exchanging woodworking stories when the giraffe's wife leaned her head down the basement stairs: "Telephone; it's your boss." "I'd better take that upstairs," the giraffe told the elephant. "Please make yourself at home." The elephant saw a project on the table and decided to explore it further. As he moved through the doorway he heard a scrunch. He backed out. "Maybe I'll join the giraffe upstairs," he thought.

> But as he started up the stairs, he heard them begin to crack. He jumped off and fell back. It too began to crumble. As he sat there dismayed, the giraffe came down the stairs. "What is happening here?" the giraffe asked. "I was trying to make myself at home," the elephant said. The giraffe looked around. "I see the problem. The doorway is too narrow. If you'd take some classes, we could get you down to size. And the stairs are too weak to carry your weight. If you go to ballet class, I'm sure we could get you light on your feet." The elephant said, "I'm not sure that a house designed for a giraffe will work for an elephant, not unless there are changes. (Thomas, 1999, pp. 3–5)

In this abbreviated fable from *Building a House for Diversity: How a Fable about a Giraffe & Elephant Offers New Strategies for Today's Workforce*, the elephant and the giraffe represent a diversity mixture which has been defined as any combination of individuals who are different in some ways and similar in others. It is in this collective mixture where true diversity lies (Thomas, 1999). According to legal definitions, 20% of adults in the U.S. could be considered to have a disability. These individuals represent a significant part of our diverse society, but somehow disability is often omitted from conversations about diversity (Scheef et al., 2020). Many students with disabilities relate to this fable as they navigate college campuses (Strange, 2000).

Students with disabilities have been less than successful in participating fully in the college experience and in attaining a college degree; this is a problem because there is clear evidence that students with a wide variety of disabilities are represented on college campuses (Hall & Belch, 2000). College students with mobility impairments, despite accommodations offered by the Americans with Disabilities Act (ADA) and Section 504

of the Rehabilitation Act of 1973 (Section 504), experience a disconnect between their own experiences and the experiences of their peers who are nondisabled. Navigating a college campus for these students impacts their attitudes and feelings due to the consistent barriers of traversing the campus (Strange, 2000).

Mobility Impairment

The medical model of disability defines mobility impaired individuals as those who experience the inability to use one or more of their extremities or the lack of strength to walk, grasp, or lift objects. A wheelchair, crutches, or a walker may be utilized to aid in mobility for the individual traveling from one area to another (The ACCESS Project, 2010). The medical model links a disability diagnosis to an individual's physical body. Defining disability through the medical model is not viewed as inherently negative, but it shapes how the person will be viewed moving forward. Society typically defines disability through the medical model of disability, but disability advocates are taking steps to transition that definition to the social model of disability. The goals are to see these students beyond their diagnoses and physical limitations and to understand how their disability shapes their human experience.

The transition from the medical to the social definition of disability prioritizes the humanness of the individual. The social model recognizes disability as a complex phenomenon which includes the interplay between the medical model definition (noting the physical components of the body) and the barriers the built environment has on the individual (Vermeersch & Heylighen, 2015). This way of defining mobility impairments identifies that these individuals have more commonalities with their peers than differences (Hall & Belch, 2000). Literature is slowly growing to address the campus

experience of students with disabilities as well as recognizing disability as a social identity and an aspect of campus diversity. The social model of disability is recognized as a major step forward in disability theory (Butler & Bowlby, 1997).

Sense of Belonging

Even though individuals with disabilities and their nondisabled peers have more commonalities than differences, individuals with disabilities still experience unique and specific challenges. Research has indicated that students with disabilities have difficulties adapting to college and consider dropping out (Hall & Belch, 2000; Strange, 2000; Vaccaro et al., 2015). An explanation to these findings points to the societal stigma that communicates the belief that the student with a disability is incapable of thinking, learning, or achieving (Hall & Belch, 2000). People with disabilities are consistently told by the dominant culture what they cannot do and what their place is in society. This belief is then internalized and the person with a disability comes to believe they are, in fact, less than capable compared to their peers (Butler & Bowlby, 1997; Madaus, 2011). However, literature reveals that people with disabilities have challenged these implications and view on disability.

In order to integrate students with disabilities into the academic community, clearly stated acceptance is imperative. Primary themes that contribute to a sense of belonging for college students with disabilities are self-advocacy, mastery of the student role, and social relationships (Vaccaro et al., 2015). For students with disabilities, being seen as a legitimate student is essential to a sense of belonging (Abes & Wallace, 2018).

Campus Mobility

There are four major federal laws that require accessibility in new construction or alterations made within or around buildings: the ADA, the Architectural Barriers Act of 1968 (ABA), the Fair Housing Act, and Section 504. Although the ADA is the broadest law that requires architectural accessibility, the other laws that often apply to projects tend to be overlooked (New England ADA Learning, n.d.). Specifically, the ADA and Section 504 govern the requirements of postsecondary institutions with respect to campus accessibility. The ADA and Section 504 work together to help establish equal access for qualified students with disabilities and to provide reasonable accommodations to students attending higher education (Simon, 2011). With the narrow requirements higher education institutions must follow in regard to reasonable accommodations, institutions tend to limit their emphases on accommodations (e.g., extended time on tests, interpreters, accessible classrooms) as opposed to promoting the development of belonging (Vaccaro et al., 2015).

The lack of physical accommodations conveys powerful nonverbal messages. Having accommodations may meet the technical requirements of accessibility, but a sense of belonging for a student with a disability may require a standard beyond the basic requirements of accommodation. Individuals with a disability have the ability to detect obstacles or appreciate qualities that architectural designers may have ignored due to their daily physical interactions with the environment. In essence, people with mobility impairments view space from a viewpoint atypical for designers (Butler & Bowlby, 1997; Fields, 1977; Vermeersch & Heylighen, 2015). The concept of universal design (UD) began to emerge in college instruction as a means to reach the needs of a broad range of

learners, including those with disabilities (Madaus, 2011). This approach focuses on issues of social inclusion by looking at designing environments that facilitate people's freedom from barriers that restrict or prevent their ease of access while also allowing any other individual the ability to use that same environment for its intended purpose (Vermeersch & Heylighen, 2015).

Personal Statement

During my undergraduate experience, I noticed something concerning: There was a vast gap of students unable to be served well at my institution. There were very few students with physical disabilities present on campus. This realization did not sit well with me. As I transitioned into graduate work, I knew this was a topic I wanted to investigate deeper. Were students with a physical disability not interested in this university, or were there other factors at play? Higher education research on the experience of students with disabilities, specifically nuanced research regarding certain types of disabilities and how those disabilities impact students' sense of belonging, is limited. These gaps in the literature have inspired me to contribute to this body of research in order to better serve this population.

Purpose of Research

The number of students with disabilities enrolling in higher education is on the rise (Hall & Belch, 2000). Given this reality, it is imperative that institutions understand their unique needs in order to both support students well and increase retention. While research exists on the sense of belonging of students with a disability, there is no way to isolate which research applies to students with a mobility impairment. Developing a

sense of belonging is necessary for academic success (Strayhorn, 2018); therefore, more research is needed to better understand the full experience of students with disabilities.

The goal of this study is to discover how campus mobility impacts the sense of belonging of a student with a mobility impairment. Filling a gap in the literature, this study provides more specific insight through the lens of physical disabilities to better equip educators to understand and serve students with a mobility impairment. The research addresses the following question: Does campus mobility impact a sense of belonging for the student with a mobility impairment, and, if so, how?

Conclusion

More research is required to better understand the experience of students with disabilities. This study will focus on defining disability and mobility impairments, student sense of belonging, and campus mobility. In addition, this study will highlight the unique experience that has yet to be captured in full of students with mobility impairments. Retention rates for students with disabilities are suffering (De Los Santos et al., 2019). More research surrounding sense of belonging in regard to specific members of the broader population of students with disabilities offers a benefit to the entirety of higher education (Vaccaro et al., 2015).

Chapter 2

Literature Review

American higher education has experienced an increase of students with various disabilities entering college (Hall & Belch, 2000; Safer et al., 2020; Strange, 2000; Vaccaro et al., 2015). This is a direct result of increased knowledge and support within the K–12 schooling system on how to best serve students with disabilities. Because primary and secondary education are growing in their ability to serve students with disabilities well, more of those students are becoming better equipped to enter into a postsecondary institution, given the proper accommodations (De Los Santos et al., 2019). Though the K–12 schooling systems are able to better detect successful teaching strategies for their students with disabilities, that does not mean postsecondary education was properly prepared to serve these students as well. Understanding the unique perspective of the student with a disability is pivotal to their success in completing their education. This study focuses on the perspective of students with mobility impairments. Individuals with a mobility impairment may encounter barriers within their environment that make it difficult for that student to fully participate on campus (Strange, 2000).

Mobility Impairment

There are multiple approaches when it comes to defining disability. These approaches include the medical model of disability and the social model of disability. The way disability is defined can shape the way others perceive disability. Disability activists developed the social model of disability because the traditional medical model did not

explain their personal experience of disability or help to develop more inclusive ways of living (Hall & Belch, 2000; Vermeersch & Heylighen, 2015).

Medical Model

The ADA defines a person with a disability as "a person who has a physical or mental impairment that substantially limits one or more major life activity" (ADA National Network, n.d.). The way in which a person with a disability is defined within the ADA represents the medical model. The medical model purely links a disability diagnosis to an individual's physical body. This model is a conceptualization of disability as a condition a person has and focuses on the prevention, treatment, or curing of the disabling condition (Goering, 2015). This approach has been the standard on how higher education has approached defining disabilities within their students. This definition requires students to provide medical documentation of their diagnoses in order to receive support services, which can shape the way these students are perceived.

The medical model defines physical disability as a condition in which an individual's mobility or dexterity is affected (Myers, 2017, Scheef et al., 2020). There are many types of physical disabilities (e.g., mobility impairments, visual impairments, hearing impairments), but this study will look strictly at mobility impairments. A mobility impairment refers to the inability of a person to use one or more of their extremities or the lack of strength to walk, grasp, or lift objects. The use of a wheelchair, crutches, or a walker may be utilized to aid in mobility (The ACCESS Project, 2010).

Social Model

Defining disability through the medical model is not viewed as inherently negative, but it shapes the way a person will be viewed thereafter. Typically society

defines disability through the medical model, but disability advocates are taking steps to transition to the definition provided by the social model of disability. The International Classification of Functioning, Disability and Health, a framework of the World Health Organization which sets a standard language to help structure descriptions of health and other related conditions for people with disabilities, has helped to transition the medical definition to a social identity definition (World Health Organization, n.d.). Social identity is defined by how individuals describe themselves in relationship to groups they are or not a part of. The social model includes the interplay between the medical model definition (noting the physical components of the body) and the barriers the built environment places on the individual. However, barriers are not just physical. Society's negative attitudes toward individuals with disabilities and the gaps of proper accommodations within one's environment create a social disability more disabling than their physical condition itself. The social model of disability communicates that disability is not something that only happens to the population defined by the medical model; it mainstreams the experience of disability and recognizes it as a universal human experience (Vermeersch & Heylighen, 2015). It is valuable to recognize that those with disabilities are more like others in campus communities than they are different (Hall & Belch, 2000).

Even though individuals with physical disabilities have more commonalities than differences with their peers without a disability, they are still often looked at as objects of sympathy or medical curiosity. The social model of disability argues that people who lack particular physical or mental abilities have been rendered disabled by a society whose organization marginalizes them economically, politically, and socially and ignores their

interests in the creation of the built environment (e.g., not having proper accommodations for that demographic; Abes & Wallace, 2018; Butler & Bowlby, 1997; Hall & Belch, 2000; Vaccaro et al., 2015; Vermeersch & Heylighen, 2015). According to this model, it is not people with physical disabilities who are the problem; it is society that is the problem (Abes & Wallace, 2018; Butler & Bowlby, 1997; Hall & Belch, 2000; Vaccaro et al., 2015; Vermeersch & Heylighen, 2015). For example, this model would say that wheelchair users could be as independent as everyone else. But instead, students with a disability experience life more dependently due to the way college campuses were designed without having them in mind (Butler & Bowlby, 1997). Implications of this model would include the importance of moving from accommodation to inclusion, treating disability as a social identity, and promoting the physical reality of bodies for what they are and how they shape people (Abes & Wallace, 2018). The social model of disability is recognized as a major step forward in disability theory (Butler & Bowlby, 1997).

Sense of Belonging

The social identity lens is important for individuals with a disability to allow them to be seen beyond their diagnosis. Even with the basic commonalities of the human experience, there are still specific challenges students with disabilities experience when it comes to cultivating a positive sense of belonging on a college campus (Hall & Belch, 2000; Safer et al., 2020; Vaccaro et al., 2015). Looking at student sense of belonging broadly, intentional interactions with students help to cultivate a positive internal regard such as self-esteem, satisfaction, and feelings of being valued (Carter et al., 2018; Masika & Jones, 2016).

Strayhorn (2018) defines student sense of belonging as:

> perceived social support on campus, a feeling or sensation of connectedness, and the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the campus community or others on campus such as faculty, staff, and peers. (p. 4)

Other literature describes sense of belonging as being fostered specifically through campus involvement (Vaccaro et al., 2015). Due to the social construction of campuses, many institutions are not designed to instill the sense of belonging for students who are underrepresented or marginalized (Hall & Belch, 2000). The absence of sense of belonging is typically described as a *sense of alienation*. Sense of alienation is linked to the opposite characteristics of sense of belonging (e.g., dissatisfaction, low self-esteem, depression, substance abuse, and suicide; Strayhorn, 2018). An environment dominated by a single and consistent type (i.e., the majority) accentuates its own characteristics over time, attracting, satisfying, and retaining individuals who share the dominant features. The students that are highly represented on campus and experience a function of congruence with the dominant group will have a greater chance of experiencing a positive sense of belonging. This collection of dominant features is defined as human aggregate components. Human aggregate components are those related to the collective characteristics of people in an environment. These characteristics create features in an environment that reflect varying degrees of differentiation and consistency (Strange, 2000). Although there is no clearly marked road map to help underrepresented groups navigate the unfamiliar territory of college campuses, the values of community, equality, and human dignity can help guide the way (Hall & Belch, 2000).

Disability and Belonging

Establishing diversity is important in higher education because it increases students' ability to see the world through the perspective of another individual, provides a deeper interest in social issues and societal improvements, provides a stronger belief in social equality, heightens understanding of the importance of making civic contributions, and increases the likelihood of voting in a state or federal election. Disability advocates argue that the medical model has made it difficult for disability to be recognized as a form of diversity. When viewing human differences through the medical model, the term normal describes what is desirable. People generally desire to hear this term when receiving information about personal health from a physician. In the context of higher education, this focus on the use of a medical model of disability is perhaps reinforced by the necessity of students needing to provide medical documentation in order to receive services from a disability services office (Myers, 2017; Scheef et al., 2020).

Since students with disabilities are a growing population of historically marginalized students pursuing higher education after high school, there has also been tremendous growth of students with various disabilities being admitted in higher education. A number of factors have contributed to this increase. Over the past 25 years, disability rates in the general population have increased due to better ways of identifying various disabilities, improved K–12 support services for students with disabilities, and more research done to better understand the disability experience. Despite this increased support within K–12 schooling, both higher education literature and professionals know little about how college students with disabilities develop a sense of belonging as they transition to postsecondary education (Vaccaro et al., 2015). The expanding enrollment of

students with disabilities at American institutions presents a significant challenge for both students with disabilities and those serving roles in institutions to know how to practically include them well (Hall & Belch, 2000; Strange, 2000; Vaccaro et al., 2015). Due to these challenges, research has found that students with disabilities have difficulties adapting to college and consider dropping out (Hall & Belch, 2000; Strange, 2000; Vaccaro et al., 2015).

Disability Stigma

A major contribution to this desire of wanting to drop out of higher education is the negative stigma that surrounds disabilities. Educators must understand the specific characteristics needed for a positive sense of belonging for students with disabilities and be informed on the societal stigma that shapes the perspective of the student with a disability. This stigma perpetuates the belief that a student with a disability is incapable of thinking, learning, or achieving or has little reason to believe that success can be found in college or to believe they can use their degree post-graduation (Abes & Wallace, 2018; Butler & Bowlby, 1997; Hall & Belch, 2000). The dominant culture consistently tells individuals with a disability what they cannot do and what their place in society is. Many of these individuals internalize this oppression and come to believe they are in fact less capable than others (Abes & Wallace, 2018; Butler & Bowlby, 1997; Hall & Belch, 2000; Madaus, 2011).

This type of stigma is a result of *compulsory ablebodiness*: the perception that normalizes physically-able bodies, setting them as the standard against which all bodies are compared. This in turn sets the perception of disability as abnormal (Abes & Wallace, 2018). Researchers have found that students often choose not to disclose their disability

upon entering college even though studies have found that disclosing one's disability and requesting accommodations were themes of student success (Vaccaro et al., 2015). When possible, students tend to downplay their disability in order to be seen as normal and not as a burden (Abes & Wallace, 2018; Vaccaro et al., 2015). One reason for this lack of disclosure is the prevalence of negative attitudes toward individuals with disabilities (Vaccaro et al., 2015). Individuals with a disability must navigate through this societal stigma and work to have control over what it means to be seen as a person with a disability in a society that holds this layer of stigma before seeing themselves as people first. Students with physical disabilities, whether their disabilities are visible or invisible to the human eye, feel as though they stand out on campus yet are not actually truly seen for who they are—this feeling would be described as the "invisibility of hypervisibility" (Abes & Wallace, 2018). These students feel invisible on campus because others see their disability only as needing accommodation rather than how their specific disability shapes them into who they uniquely are (Abes & Wallace, 2018; Butler & Bowlby, 1997; Hall & Belch, 2000; Vaccaro et al., 2015; Vermeersch & Heylighen, 2015). When it comes to disability, there is a tendency to isolate the identity and oppression and not fully understand the complexities of their lived experience (Abes & Wallace, 2018).

It is important for the student with a disability to find a community of people who see the complexities of their lived experience. Community is a place where individuals can communicate honestly, establish authentic and intimate relationships, and develop a commitment of sharing joys and sorrows with others. Community emerges through the process of human interactions (Carter et al., 2018; Hall & Belch, 2000). Students with a mobility impairment may find physical barriers manageable on campuses, but the

attitudes of other students in the campus community may create profound challenges to their ability to be successful (Hall & Belch, 2000). The perceptions and interpretations of others' discourse concerning disability, and what they consider publicly acceptable behavior within the lived organization, affects the way the person with a disability interacts within their lived community (Butler & Bowlby, 1997).

Advocating and Acceptance

Clearly stated acceptance of who the student with a disability is from their surrounding peers is important in order to integrate students with a disability into the academic community. One way this acceptance can be achieved is by using person-first language that emphasizes the individual and not the disability (Hall & Belch, 2000). This strategy is not perfect, however. Some disability advocates find problems with this approach because utilizing such a complex language style further differentiates these individuals (Hoffman et al., 2020). Regardless, language shapes attitudes, both positively and negatively. The approach of people-first language is putting the person before the disability to address this problem of not being seen as a person first. (Hall & Belch, 2000). Currently person-first language is the most politically correct approach, but it may not remain the permanent language choice. With society shifting and always adjusting how to speak of this community well, language will shift as a result (Hoffman et al., 2020).

Primary themes that contribute to a sense of belonging for college students with disabilities are self-advocacy, mastery of the student role, and social relationships (Vaccaro et al., 2015). Multiple researchers have found that self-advocacy is critical in the transition to, and persistence through, postsecondary education. Yet many students

with disabilities come to college unprepared to self-advocate because of their past reliance on parents, special education teachers, and a secondary school system that did not require self-advocacy (Abes & Wallace, 2018; Vaccaro et al., 2015). Students who can self-advocate are able to communicate their accommodation needs to others. Practicing self-advocacy will build on their knowledge of self which will not only help with their accommodation needs but also allow the student to understand their learning style strengths and the characteristics of their own disability (Vaccaro et al., 2015).

Through this process of advocating for the self and understanding the importance of self-disclosing accommodation needs, mastering the student role is another construct to their sense of belonging. Mastering the student role means "fitting in" and feeling like "just another student" (Vaccaro et al., 2015). Students with disabilities describe how their sense of belonging is tied to their ability to integrate seamlessly into collegiate life. For a student with a disability, being seen as a legitimate student is essential to a sense of belonging. Treating disability as a social identity further allows for this celebration of disability culture (Abes & Wallace, 2018).

Establishing positive social relationships that accept the student with a disability for who they are is essential to their belonging on campus. Scholars have long argued that social acceptance is the foundation for a sense of belonging and higher education studies have affirmed the significance of supportive relationships. It is incredibly important for a student with a disability to be connected socially with peers in classrooms, in residence halls, and through student involvement just like any other student on campus (Vaccaro et al., 2015). Establishing positive social relationships helps the student with a disability

feel as though they matter—to have a sense of belonging and to believe that others care and are concerned about them (Hall & Belch, 2000).

Campus Mobility

Learning to travel independently around an unfamiliar college campus can be challenging for any individual, but especially for those with a mobility impairment (Abes & Wallace, 2018; Butler & Bowlby, 1997; Fields, 1977; Strange, 2000). As noted above, four major federal laws require accessibility in new construction or alterations made within or around buildings: the ADA, the ABA, the Fair Housing Act, and Section 504. Although the ADA is the broadest law that requires architectural accessibility, there are others laws that often apply to projects and are often overlooked (New England ADA Learning, n.d.).

The ABA stands as the first measure by Congress to ensure access to the built environment for people with disabilities. The law requires that buildings or facilities that were designed, built, or altered with federal dollars or leased by federal agencies after August 12, 1968, are to be accessible. Facilities that predate the law generally are not covered, but alterations or leases undertaken after the law took effect can generate coverage (U.S. Access Board, n.d.). The Fair Housing Act prohibits discrimination on the basis of disability in all types of housing transactions. There are two major areas that the Fair Housing Act enforces in order to protect persons with a disability. The first area ensures that the local laws or regulations concerning land within a specific area or city do not restrict the person with a disability from participating in communal areas such as group homes or college institutions. The second area ensures that newly constructed multifamily housing is built in accordance with the accessibility requirements so that it is

accessible to and usable by people with disabilities, in particular, those who use wheelchairs (The United States Department of Justice, 2015).

Specifically, the ADA and Section 504 govern the requirements of postsecondary institutions with respect to campus accessibility. The ADA was signed into law on July 26, 1990, by President George H. W. Bush. The ADA is one of America's most comprehensive pieces of civil rights legislation that prohibits discrimination and guarantees that people with disabilities have the same opportunities as everyone else to participate in the mainstream of American life—to enjoy employment opportunities, to purchase goods and services, and to participate in state and local government programs and services (United States Department of Justice Civil Rights Division, n.d.). Titles II and III of the ADA prohibit discriminatory lack of access for individuals with disabilities to goods and services of public services and public accommodations. Title II extends a prohibition on discrimination to the activities of state and local governments regardless of whether such entities receive federal financial assistance. Title III prohibits discrimination on the basis of disability in places of public accommodation (New England ADA Learning, n.d.).

Similar to what the ADA offers for individuals with disabilities, Section 504 is a national law that protects qualified individuals from discrimination based on their disability. It forbids organizations and employers from excluding or denying individuals with disabilities an equal opportunity to receive program benefits and services. The ADA and Section 504 work together to help establish for qualified students with disabilities the opportunity to participate in programs or activities and reasonable student accommodations. Reasonable accommodations are modifications or adjustments to the

tasks, environment, or way things are usually done that enable individuals with disabilities to have an equal opportunity to participate in an academic program or a job (Simon, 2011). With this narrow requirement of what higher education institutions must follow, this can limit institutions to merely emphasize accommodations (e.g., extended time on tests, interpreters, accessible classrooms) as opposed to proactively promoting the development of belonging (Vaccaro et al., 2015).

Inclusion

The lack of physical accommodations convey powerful nonverbal messages. Having accommodations may meet the technical requirements of accessibility, but a sense of belonging for a student with a disability may require a standard beyond the basic requirements of accommodation. For the student with a disability, both physical and psychological aspects of the environment can detract from conditions of safety and inclusion and can contribute to their attainment (Abes & Wallace, 2018). For example, the absence of an elevator may convey a lack of concern for students with mobility needs on that specific campus (Strange, 2000). A way to combat a student's feeling of not being cared for would be staff and faculty going beyond the requirements and to have at least one staff member check the physical set-up of every classroom on campus and rate its accessibility for students with physical disabilities. It can also look like providing bus service equipped to accommodate wheelchairs. Larger institutions can find this troubling due to the amount of students that would need to be individually served beyond what reasonable accommodations require, and finding the capacity to monitor every building and classroom that is on campus would be challenging. Smaller universities may have the capacity to monitor whether every classroom and building is accessible, but other barriers

due to financial limitations to meet the needs of every individual involved with their disability services office may not be feasible beyond what reasonable accommodations require (Fields, 1977).

Architectural Design

Individuals with disabilities are in theory experts when it comes to what accommodations are needed in buildings due to their need for them. Even though these individuals have not received education on how to design buildings, their input should be considered when discussing the architectural layout of new buildings. Individuals with a disability have the ability to detect obstacles or appreciate qualities that designers may have ignored due to their daily physical interactions with the environment. Input from individuals with a disability tends to be neglected within discussions focusing on functional aspects of their specific experience (Vermeersch & Heylighen, 2015). In line with a medical model of disability, building codes translate accessibility into facts which can be objectively measured. This measurement leaves those affected by poorly designed buildings incapable of joining the design debate because they are supposedly not experts in the field. Individuals with disabilities are able to provide a different perspective to these conversations based on the differences in how they interact with the environment (Vermeersch & Heylighen, 2015). Individuals with physical disabilities are more able to appreciate spatial qualities that designers may not be attuned to. In architectural practice, this ability is not fully acknowledged as a valuable resource for design. Whether having difficulty in walking or using a wheelchair, people with mobility impairments view space from a viewpoint atypical for designers (Butler & Bowlby, 1997; Fields, 1977; Vermeersch & Heylighen, 2015).

The concept of universal design (UD), originally rooted in architecture, began to emerge in college instruction as a means to reach needs of a broad range of learners, including those with disabilities (Madaus, 2011). It is an approach to design that increases the potential for developing a better quality of life for a wide range of individuals. It is a design process that enables and empowers a diverse population by improving human performance, health and wellness, and social participation (Steinfeld & Maisel, 2012). This approach focuses on issues of social inclusion by looking at designing environments that facilitate people's freedom from barriers that restrict or prevent their ease of access while also allowing any other individual the ability to use that same environment for the purpose the environment was built for (Vermeersch & Heylighen, 2015). An example of this is incorporating user-friendly tables throughout a college institution for those in wheelchairs, which also meets the needs of any other student needing to use a table. Universal design is not a synonym for accessibility standards. The UD process differs from one complying with accessibility standards by integrating accessible features throughout the overall design. This difference in process is important because integrating these features throughout results in better design. Additionally, it prevents stigmatization often associated with accessible features that have been added on late in the design process or after it is complete, as a modification. Universal design also differs from accessibility requirements in that accessibility requirements are usually prescriptive whereas UD is performance based. The approach does not have minimum requirements but instead addresses usability issues (Steinfeld & Maisel, 2012).

Conclusion

Students with disabilities are seeking for their peers to see their disability as part of their social identity. Research points to students with a disability experiencing a stronger sense of belonging when others are able to see how disability shapes their human experience uniquely (Vaccaro et al., 2015). Reasonable accommodations are provided legally for the student with a disability with the goal that they can use those resources to fully participate on campus and that safe and inclusive environments are created through the physical arrangements in classrooms, residence halls, and campus grounds. Human aggregate components, organizational structures, and the social constructions of the dominate group influences whether the student with a disability feels included in their environment (Strange, 2000). This points to the hypothesis that having accommodations may meet the technical requirements of accessibility, but a sense of belonging for a student with a disability may require a standard beyond the basic requirements of accommodations. If college campuses were designed with the marginalized in mind, how would that impact student sense of belonging? This leads to this study's research question: Does campus mobility impact a sense of belonging for the student with a mobility impairment, and, if so, how?

Chapter 3

Methodology

This study used a qualitative design and implemented a best practices and phenomenological approach utilizing interviews of students at a large research-based institution located in the Midwest to accurately capture their experience. This study assessed best practices by theming New Mobility Magazine and United Spinal Association's 2020 issue *Wheels on Campus: A Guide to Wheelchair-Friendly Higher Education.* The researcher interviewed four undergraduate participants who use the physical accommodations present on their college campus. This study compared and drew conclusions based on the discovered interview themes and best practices derived from the ten institutions listed on *Wheels on Campus*. In the data collection, this study obtained an understanding of how campus mobility effects a sense of belonging for the student with a mobility impairment.

Research Approach and Design

The purpose of this study was to explore best practices of sense of belonging and campus mobility for students with a mobility impairment. This design utilized a qualitative approach concerned with how to improve actual performance. Rather than seeking numerical data to analyze, qualitative research focuses on the fullness of an experience and examines the meaning of a group (Creswell, 2012). This was done through identification and codification of something typically referred to as a best practice. "Best practices" is a term defined as the methodological requirements associated

with the evaluation and ranking of organizational performance. Bretschneider et al. (2005) imply that a best practice is best when compared to any alternative course of action and that it is a practice designed to achieve some deliberative end. In a best practices study, appropriate comparability of cases and sufficient definitions of cause/effect elements and relationships help to define a best practice. Essentially, two conditions must be met: completeness of cases, and comparability of cases (Bretschneider et al., 2005). This approach was used to gain insight into what well-established universities are currently implementing to meet their students' needs.

The researcher conducted phenomenological interviews with undergraduate participants who attended one of the institutions listed in *Wheels on Campus* to better understand how the students are using the accommodations present and if they are satisfied. A phenomenological approach was used to gain insight into the perspective of a student with an impaired mobility and the interconnection between their specific sense of belonging and campus mobility. Creswell (2012) explains "a phenomenological study describes the common meaning for several individuals of their lived experiences of a concept or a phenomenon" (p. 76). In a phenomenological study, data is often collected through one-on-one interviews, which provides a space for an individual's expression of personal depth and richness of the experience (Creswell, 2013).

Context and Participants

The interviewing component took place with students from a public research institution in the Midwest. This institution has an approximate enrollment of 23,000 students. Currently, this institution provides services for a wide range of disabilities but provides many accommodations for students with mobility impairments. These

accommodations include adapted physical education, adaptive computer technology, adjustable height tables, housing, loaner wheelchairs, note taking, parking, priority class scheduling, push sticks (to reach elevator buttons), service animals, shuttles, snow removal, and wheelchair repairs. According to an online profile, in 2020 there were 25 students using wheelchairs registered in the Disability Services Office.

The researcher sent out an email invitation to the director of disability services for that office. The director sent out the invitation to 61 past and current students in order to keep confidentiality. Four students were interested. Those students emailed the researcher directly stating their interest in participating in the interview process. Before the researcher interviewed the participants, all four students signed and agreed to the informed consent document (see Appendix A) and filled out a demographic survey provided by the researcher. Via email, the researcher invited each participant to schedule a video interview through the platform Zoom. With the participants' permission, the researcher recorded each interview to adequately theme and code for the data collection process.

Of the participants, two identified as male and two identified as female. Two participants self-identified as White, one participant was reported Latino/Hispanic/Chicano, and one participant was reported African American/Black. The ages of the four participants ranged between 20 and 35 years old. Three participants used wheelchair and one participant used a cane in severe conditions. Two participants were sophomores, one participant was a junior, and one participant was a senior at the university. Two of the participants lived on campus, and the other two were reported commuters.

Procedure

The proposal was approved by the institutional review board at the chosen institution. The researcher used an adaptation of the University Belonging Questionnaire (UBQ; see Appendix B) developed by Slaten et al., 2017. This questionnaire attempts to accurately and completely measure the construct of sense of belonging by providing a universal measure to be used by scholars across research studies and disciplines. The researcher used this questionnaire as a guide to help assess if sense of belonging would be adequately assessed through the formation of the open-ended questions formed for the interviews for this study (see Appendix C).

The researcher recorded each scheduled Zoom interview to have it documented to transcribe, code, and theme. The researcher posed 11 questions assessing the student's current sense of belonging on campus, their current attitudes toward their university's accessibility/accommodations, and whether those two constructs influenced each other. Through a semi-structured approach, the researcher did not strictly follow a formalized list of questions (Creswell, 2013). The researcher asked more open-ended questions, allowing for a discussion with the interviewee rather than a structured interview with a straightforward question and answer format. This approach provided more insight into their experience with campus mobility and student sense of belonging that was comfortable for the participant.

Data Analysis

The researcher used a best practice design through analyzing common institutional practices and interviewing students with open-ended response protocol questions. Participants had the opportunity through preset open-ended questions to

explore the sense of belonging in relationship with campus mobility which could not be fully understood through survey response alone. This best practice approach allowed the data to represent a specific minority group and highlight shared experiences with what is currently working and what could use improvement.

The researcher recorded the protocol responses and then coded those responses to generate themes through frequency and pattern recognition. Coding is used to "make sense out of text data, divide it into text or image segments, label the segments with codes, examine codes for overlap and redundancy, and collapse these codes into broad themes" (Creswell, 2012, p. 243). This process allowed the researcher to make sense of the qualitative data.

Summary

This qualitative methodology sought to answer the question: Does campus mobility impact a sense of belonging for the student with a mobility impairment and, if so, how? Individual interviews utilizing a semi-structured approach through a series of open-ended questions formalized questions that other university institutions may be wondering. The results of this study will help develop a better knowledge of how a sense of belonging is necessary for academic success; therefore, more efforts must be made to recognize all aspects of students with disabilities experience starting with mobility impairment research.

Chapter 4

Results

The study results showed a connection between the physical accommodations present and student sense of belonging. There was an overlap in one theme after coding from the four interviews with students, the 10 named "most wheel-chair friendly universities" found in *Wheels on Campus* magazine (United Spinal Association, 2020), and the institutions' disability services websites. Through the participants' willingness to engage in questions and conversation about their perceived sense of belonging, and after identifying common institutional best practices, one major theme was prominent within both the interviews and best practices: They all desire the vision to go beyond what ADA legally mandates. The other noticeable themes revealed from the interviews were access and equity as well as fear of being needy.

Wheels on Campus

New Mobility is the membership publication of United Spinal Association and the leading quality of life publication for wheelchair users and those with mobility-related disabilities. Since 1989, the magazine has been committed to telling authentic stories with diverse voices from within the wheelchair-using community.

Starting with a list of 400 colleges and universities highly ranked by U.S. News & World Report, *New Mobility* and United Spinal Association (2020) researchers sent out an exacting survey to disability service offices throughout the United States, publishing the results in *Wheels on Campus: A Guide to Wheelchair-Friendly Higher Education*.

Respondents were scored on 45 criteria specific to wheelchair-using students including wheelchair-friendly campus terrain, percentage of independently-accessible buildings, integrated accessible housing options, personal assistance programs, adaptive sports and recreation, accessible on-campus transportation, adaptive computer labs, inclusive fraternities and sororities, and more. To verify survey results that indicated a wheelchair-friendly culture, *New Mobility* sent wheelchair-using reporters to perform personal tours and inspections and interview students and staff on several campuses. When the pandemic complicated that process, reporters confirmed survey results with extensive phone interviews and online research in combination with their personal experience. In addition to survey responses, institutions were scored on the number of wheelchair users registered by disability resource offices on each campus. Results demonstrated a strong correlation between the number of registered wheelchair users and a full range of programs and activities that create a truly wheelchair-inclusive culture (United Spinal Association, 2020).

Best Practices

Ten institutions have been identified by *New Mobility* for providing holistic accessibility that reaches beyond the standard. The major theme that emerged is the desire to go beyond what the ADA requires from the institution. All ten institutions recognize this as a major priority to the implementation of their department. Among this theme, five subthemes emerged as well. These subthemes represent how the institutions meet this desire to move beyond ADA requirements. These subthemes are (a) built environments; (b) curriculum design; (c) technology and information; (d) campus events;

and (e) workplace. The theme and subthemes are recognized by the number and frequency in which they were mentioned on the institutions' disability services websites.

Moving Beyond ADA Requirements

The institutions that were analyzed reflect an overall campus culture that acknowledges the full range of wheelchair users' needs and interests, such as adaptive sports and recreation, wheelchair repair options, appropriate physical therapy, nearby rehabilitation facilities, and more. In short, these features are what make up a wheelchair-friendly campus experience. Tom Webb, the director of the Disability Services office from Wright State University, in response to the question, "Why is it important to go beyond ADA guidelines?", made this statement:

> It's not just about buildings and accommodations. We want to build a culture, and the ADA is just a building block, a kind of foundation. That was many years ago. It has grown in its application so all with disabilities are welcome, and this is normal. It's important from a student's point of view—quite a few have struggled in high school, so we give them an opportunity to start fresh, and many times they didn't think that would be an option. That is key—the reshaping of their attitude. Going beyond, creating a welcoming culture, no matter the disability background. That is what has allowed me to feel connected, and it makes a difference in terms of retaining students rather than them dropping out or leaving. Access and inclusion are woven into every part of the university. Absolutely we have to go beyond the law. When you look at a lot of disability services offices, it is a very transactional, superficial process. In my experience, accommodations are a small part—maybe 30%. There's housing, tech, friends, relationships, we look at the

> whole student and their full experience. I've seen that in a number of places, the need to go beyond (United Spinal Association, 2020, p. 42).

Having this shared theme lays the foundation for these 10 institutions to determine how they exceed ADA requirements. The shared subthemes that were found on their departments' websites were:(a) built environments; (b) curriculum design; (c) technology and information; (d) campus events; and (e) workplace.

Built Environments. All ten institutions revealed a desire to build a campus that could be inclusively accessible for all students and is making progress to achieve that goal. The aspiration to universally design buildings to meet access and equity for students is important. University of Arizona employs design standards for all new construction and renovation that exceeds ADA compliance. Arizona Design Standards encourage and require, when possible, the implementation of a universally designed built environment. Disability Resources Center staff consult on planning for new construction and major renovation projects as well as deferred maintenance. This institution's website (*About Us*, 2021) stated that they regularly assess campus spaces and solicit feedback from community members for this continual improvement.

Curriculum Design. All ten institutions revealed the shared importance of academic support through curriculum design. The goal is to encourage faculty to think broadly about all the different characteristics students may bring to the classroom and to create educational experiences that maximize engagement without compromising rigor. Ball State University instilled the Faculty Mentorship Program for first-semester freshmen with disabilities. The program assigns faculty mentors to each participating student. These mentors regularly meet with their students and help them with the

complexities of the academic experience at a university. These institutions have found that engagement with faculty is a key to student success due to the challenges the transition to college can be for students with disabilities.

Technology and Information. All ten institutions recognize the rise in new adaptive technologies and information that also allow for universal design to be reached. The mission of Accessible IT Group (AITG) at the University of Illinois at Urbana–Champaign is to promote a campus environment that integrates the universal design of information technology resources through outreach, evaluation, collaboration, education, research, and adaptive technologies to ensure the inclusion of students with disabilities. All ten institutions see that Information Technology accessibility is providing the pathways for everyone to maneuver the internet easily, including those with disabilities.

Campus Events. All ten institutions indicated a strong emphasis on accessible engagement for their students with disabilities. This means providing opportunities such as adaptive sports and recreation and multiple options for accessible events like accessible yoga. The University of Florida provides social and academic events which they state are important opportunities for the campus community to connect. Their disability resource center is committed to supporting event planners in creating welcoming experiences that reduce or eliminate accommodations. The staff consults on major campus events and offers training and resources. Student athletic programs and extracurricular and organizational clubs are attended and made a priority.

Workplace. Nine out of the ten institutions indicated a strong partnership with their career services department or revealed that they provide career services within their disability services office. University of California Berkeley offers specialized career

services for students with disabilities. This allows the department to help soon-to-be college graduates with disabilities to overcome barriers to employment through short-term vocational training (including apprenticeship), supportive services, disability benefits counseling, and comprehensive career services.

The implementation of top-ranked institutions all share the common mission to move beyond ADA regulations. An important criterion Wheels on Campus took into consideration was the number of wheelchair users registered by disability service offices on each campus. *Wheels on Campus: A Guide to Wheelchair-Friendly Higher Education* stated that there was a strong correlation between the number of registered wheelchair users and a full range of programs and activities that create a positive wheelchair-friendly culture. The student number of registered wheelchair users ranged from 21 to 100 students enrolled. This reveals the connection of campus mobility and student sense of belonging.

Interviews

There were three main themes that emerged from interviewing the three participants. Those themes were (a) access and equity; (b) fear of being needy; and (c) moving beyond ADA requirements.

Access and Equity

All four participants viewed the physical accommodations present at their institution in a similar way. Instead of seeing the accommodation as something there to check off a list, the participants viewed the accommodation present through the lens of access and equity. Accommodations to physical spaces are required by ADA law, but each participant viewed physical adjustments as their way to reach equal access to

campus. For example, when listening to Ethan speak on the physical accommodations present, he disclosed how the handicap buttons meet the standard requirement but they are placed with the minimum height requirement so it is difficult to access those buttons. Ethan stated,

> Yes, um, the only issue I have is, like I said earlier with the handicap buttons, that's really the only issue that makes it hard, because I can't get in the building by myself without help. So, and that kind of leaves a sense of, well, I feel like I don't want to be seen now. Because I can't get in there. So that's like a thing.

Sam also described the accommodations present through that same lens of access and equity. Sam positively stated,

> Some of the buildings are a lot more wheelchair accessible which does make it feel like okay, they did try to accommodate who needed it. I do have noticed that a lot of pavements are like, you know, kind of like, you have to rise up, you have to like walk up to them at an angle. I have noticed that a lot of the walkways are like that, which is like, it does help me get up there because I, I can't just like, walk up there myself, I have to roll up there into my chair, which does make you feel like yes, they have thought of me. A lot of their elevators they have like, like buttons, they're also like a little lower, which for people who won't be able to reach them make the smaller button which is like, okay, that's very accommodating.

This lens of access and equity shaped the conversation by how the participants defined accommodations. Most institutions view accommodations through the lens of meeting a policy standard that they legally need to meet. It did not matter if the

accommodations were painted in a positive or in negative light; the four participants defined the physical accommodations present through this lens of access and equity and not by a legal lens.

Fear of Being Needy

Throughout the conversations, all four participants were cautious in how they approached offering critique of their institution. They all stated their institution is recognized for the physical accommodations present and they are grateful for those accommodations, but there is a need for improvement. The fear of being needy highlighted the participants' desire to not be seen as disrespectful, needy, or pushy for wanting to advocate for themselves even though self-advocacy is important to them. Sarah stated,

> Because some of the things we are doing, it makes me see [the university] in a very positive light, very, like happy that I'm here and that I found a school that understands what my needs are, and why, why it's not a special treatment, it's to make it so you can get through at the same level as everybody else. And then, I mean, sometimes I'm, I think there's ways that it could improve, but it's just, it's nice that it's there. And I like sometimes you feel like you don't want to complain too much. Because then they're like, well, then maybe we'll just get rid of it.

Students felt timid to speak up if accommodations were not being met well because of the fear of being seen in a negative light by their faculty and peers. Ethan also stated,

> It's hard to do that [educate faculty] without coming across as disrespectful sometimes. Because, you know, you don't want to seem like you're above the professor. But at the same time, it's, you know, you have to tell them, and they

> have to be humble enough to understand that that's not where I'm coming from. It's just trying to get them to understand a little bit better.

Overall the students were pretty pleased with how accepting faculty were, but the overall consensus was that they did not know what to expect out of their peers. The participants had a desire to educate others and to advocate for themselves, but there is a chance peers will not understand where the participants are coming from because they do not have a disability. All four participants found themselves in this tension of desiring to self-advocate while also wanting to fit this desired image, not wanting to risk the way their peers view them.

Moving Beyond ADA Requirements

The last theme revealed, shared with the theme identified for best practices, is the desire to see the university move beyond ADA requirements. Three out of the four participants indicated how the university does provide more accommodations compared to other institutions, but there is still a need for improvement. Nikki contended,

> I feel like the university accommodations, everybody's trying to do the minimum that they have to do to be, you know, compliant. And to some extent, we have an adversarial system. Which the spiel that I've heard quite a few times is, you know, we're trying to get students to advocate for themselves. But at the same time, like, you shouldn't have to advocate all that hard to get accommodations and to get things done. It just shouldn't be that big of a challenge.

This was Ethan's response to the question, "Are the physical accommodation at your university currently sufficient?":

> Um, I would say in terms of the minimum, they are. They enforced the minimum standard. Okay, that's all I'll say. But they don't go above and beyond which I think they should to really truly be the word sufficient there.

The going above and beyond what ADA mandates is when these participants would say that the physical accommodations present would be sufficient. Until their view of accommodations reach full access and equity, these participants would suggest for the university to continue striving to make the improvements needed.

Conclusion

The top ten wheelchair-friendly campus communities moved beyond being legally accessible to being friendly and welcoming to students with mobility impairments. They did this through their built environments, curriculum design; technology and information, campus events, and workplace connections. Students interviewed saw the physical accommodations as opportunities for equity. They also noticed their role in communicating to the campus community. Students expressed a desire for accommodations to move beyond the minimum requirements to create a welcoming environment. The implications and discussion of these findings will be discussed in Chapter 5.

Chapter 5

Discussion

This study focused on the intersection of campus mobility and sense of belonging for the student with a mobility impairment. The impact of accessibility in relation to sense of belonging becomes evident after considering the results derived from the shared experiences disclosed by the participants and from analyzing the actions campuses are using as best practices. Student sense of belonging is described as feeling accepted and liked by peers, feeling connected to others, and feeling like a member of a community. The data in Chapter 4 reveal this relationship between student sense of belonging and campus mobility.

The students who were interviewed communicated that they want to be seen and considered when navigating physical spaces on campus. Feeling as though they are being considered would look like having physical accommodations easily noticed around campus. When directed back to the literature, disability activists have been working hard to shift the definition of disability. This shift is moving from a more medically prescribed way of defining disability to a way that also provides room for the human experience to exist (Abes & Wallace, 2018; Butler & Bowlby, 1997; Hall & Belch, 2000; Vaccaro et al., 2015; Vermeersch & Heylighen, 2015). Because disability service offices need documentation in order for the student to receive certain services, higher education tends to view disability as an issue to purely accommodate. This lens can dismiss the human experience. Dismissing human experiences of those with disabilities does not take into

consideration the potential systemic barriers, derogatory attitudes, and social exclusion that make it difficult for individuals with impairments to experience feelings of belonging. Therefore, students and institutions could be viewing accommodations from two different lenses. Institutions are viewing accommodations as a way to fix a prescribed problem, while students view accommodations as a way to fix a prescribed problem through the interplay of their surrounding experiences (e.g., peer attitudes, systemic barriers, and social inclusion or exclusion).

Regulations from the ADA are being challenged when wanting to improve disability student sense of belonging, because depending on the individual, proper accommodations may require more than the legal minimum requirement. The traditional view of defining disability through the medical model is similar to how higher education institutions view ADA guidelines. The guidelines are prescriptive and may not consider the human uniqueness of each student. The ADA guidelines should be put into place to set the foundation for institutions to build from and expand to meet the human needs of each individual student. This shared theme of moving beyond ADA regulations is vital for any institution that has a desire to create inclusive college campuses to improve the sense of belonging for any student with a physical disability.

Each participant who was interviewed indicated either positive or negative assumptions about their institution's leaders based on how accessible their campus was for them. However, this can cause a problem because many institutions are limited by the amount of resources they are able to provide. Seeing the types of accommodations by institutions can provide an example of a holistic approach of meeting students' needs to other individuals on campus without mobility impairments. The 10 institutions

recognized for their best practices implement accommodations that partner with other departments around campus. Other departments that may partner with a disability services office are IT, career development, academic enrichment center, and student activities. These partnerships allow more offices on campuses to be educated in how to serve students with disabilities well. Providing more avenues to educate faculty, staff, and students positively impacts the sense of belonging for the student with a disability. The more educators and peers that understand the misconceptions and barriers the student with a disability faces, the less pressure the student feels to try to figure out the proper way to self-advocate because there is a common understanding of why the student is asking for more help.

The more staff and peers are educated on disability services, the less the student with a disability feels like they need to advocate for themselves in return. Learning how to self-advocate is an amazing skill, but the amount of self-advocacy students are finding themselves needing to do in order to be understood by peers is exhausting. Educating more faculty, staff, and students on disability services will hopefully provide relief from the amount students with disabilities need to advocate for themselves, but it will not erase that need. Previous research points to this needed ability to self-advocate because students must disclose their disability to receive any accommodations they want to use (Abes & Wallace, 2018; Vaccaro et al., 2015). This is different from the structure of K–12 schooling. Students with disabilities want to be seen like their peers, and accommodations are the way in which they can reach that desire. Many college students find themselves caught in the tension of wanting to advocate for themselves (because they need to in order to succeed in higher education) but not wanting to be seen in a

negative way by their peers or faculty. Institutions that provide educational opportunities for students with disabilities to help advocate for themselves could be beneficial in developing a sense of belonging for a student with a mobility impairment.

Implications for Practice

It is important to note the institutions that were named for their best practices are all public institutions. The way those institutions manage to move beyond ADA requirements (based off the subthemes listed in Chapter 4) may look different for smaller, privately funded institutions.

Overall, implementing more educational opportunities for faculty and staff in regards to serving students with disabilities well could be a beneficial starting point. Moving beyond ADA requirements could look like informing colleagues from all departments on key disability topics (e.g., stigma, social model of disability, universal design). This allows more staff to support the student with a disability in all areas across campus. This is also an inexpensive method for an institution to implement that is tied to student sense of belonging. Training would include educating faculty and staff on the different accommodations that their institution offers, why the institution provides those accommodations, etiquette on how to speak to and interact with students who have a disability in a thoughtful and respectful manner, and the proper ways on how to refer a student to a disability services office. The more staff and peers are educated on disability services, the less the student with a disability feels like they need to advocate for themselves in return.

Another recommendation would be for institutional leaders to develop a better understanding of the steps that the most welcoming campuses are taking. It is important

for disability service offices to find ways to assess their institutions in order to know what practices are working and where shifts need to occur. A way to measure this recommendation could be creating a rubric or a test that institutions could use to grade their campus on its ability to welcome students. The five subthemes that represent how the ten universities are working to provide more resources that move beyond ADA requirement could be evaluated at other institutions. Where within those five subthemes could a specific institution make adjustments/improvements? Adjusting budgets to reflect an institution's desire to retain diverse students could allow for the development of programs and opportunities to help students with mobility impairments feel as though they are invited and welcomed on campus.

Implications for Future Research

All of the data collected were from the same type of institution. These institutions are all public universities. It would be beneficial to evaluate other U.Ss institutional types such as liberal arts colleges, community colleges, and private universities. This would give a deeper glimpse into what public, state-run institutions are implementing that other types of institutions could be lacking, as well as what non-research based institutions could be providing that research based institutions are not.

More interviews could serve this research well in determining a deeper understanding of the student perspective that arises from that research. Perceptions, perspectives, and understandings would be analyzed and then used to create an understanding of what it is like to experience an event. How students with mobility impairments experience campus mobility would provide greater detail about what institutions should also be implementing to serve that group of students well.

A longitudinal study could also serve this research well in determining with greater certainty the reality of campus mobility and sense of belonging for the student with a mobility impairment. Within the nature of a longitudinal study, researching a group of students with mobility impairments during their four years at a university could potentially bring more clarity to the significance of moving beyond ADA requirements to help retain college students with disabilities. A longitudinal study would lessen bias that is inevitable from solely asking students to reflect in hindsight as well as aid in identifying the specific mobility barriers that contribute most to what the student might experience.

Benefits

While there is foundational research surrounding higher education and disability, there are many gaps in the literature. Allowing more research done concerning disability within higher education allows the opportunity to normalize the conversation and spark curiosity to discover deeper ways to fully serve this demographic. With cultural stigma surrounding students with a disability, more research instills knowledge that more is being done to better understand disability culture and the blend in higher education. A sense of normalcy also has an opportunity to generate for students with disabilities pursuing higher education (Strange, 2000).

For students with physical disabilities, more research is needed to better understand each physical disability within higher education. This research contributes to those with mobility impairments. This research highlights and studies a demographic's unique experience that has yet to be captured in full. With retention rates low for those with disabilities, more studies surrounding sense of belonging in regards to specific

constituents of the broader topic creates opportunity to benefit all institutions (Vaccaro et al., 2015).

Limitations

This study shows positive results when looking at how campus mobility impacts student sense of belonging, but several limitations to this research should be considered. First, researcher bias was present during this study. Bias is challenging to avoid in qualitative research, and personal bias was a limitation when considering this specific study. The researcher has worked in communities and organizations in the past in relation to individuals with disabilities. The researcher wanted to do research on the topic of disability services and to add more literature on that topic. Care was taken to avoid implementing a specific agenda before conducting and analyzing interviews.

Second, the institutions evaluated from *New Mobility Magazine* may also present researcher bias. *New Mobility* stated that the best way to put together what came to be known as Wheels on Campus was to employ reporters and writers with firsthand knowledge of the college experience for the intended audience. Ten of the researchers set out to gather information and write about the 20 best choices for this project. All of them are college graduates, and nine of them are wheelchair users. The 10th is married to a wheelchair user and has a long career writing about accessibility in the built environment. Even with the close personal ties to this topic, the staff put in immense amount of care when facilitating the methodology to help aid in objectivity in every facet to increase the validity of the research findings.

Third, the researcher was only able to interview four participants. Due to additional participants' unwillingness to participate in the study, the researcher did not

feel that the data was fully saturated when finishing the interview component of the methodology. Greater access to more participants could increase the validity on the shared themes, and more themes have the potential to emerge from the findings. This could be beneficial to disability services research for the future.

Conclusion

The purpose of this study was to answer the question: Does campus mobility impact a sense of belonging for the student with a mobility impairment and, if so, how? After interviewing students in regards to their experiences and analyzing best practices, there is a strong correlation between student sense of belong and campus mobility for the student with a mobility impairment. Overall, students feel a positive sense of belonging when they see their institution working to meet their needs beyond what ADA requires. Providing accommodations while also providing additional supports that implement physical and social inclusion for the student with a mobility impairment is important. This could be done through educating more faculty, staff, and peers about different disability services topics or by creating a rubric for an institution to measure if they are continuously creating inclusive environments for their students.

Learning with people with different perspectives encourages collaboration and fosters innovation and creativity. Providing an academic environment rich with diversity is an important part of the campus experience. This would include students with disabilities. More than ever, today's students need to be prepared to succeed in a diverse, inclusive workforce. Diversity and inclusion benefit communities, schools, and students from all backgrounds, as research shows that more diverse organizations make better decisions with better results.

References

Abes, E.S., & Wallace, M.M. (2018). "People see me, but they don't see me": An intersectional study of college students with physical disabilities. *Journal of College Student Development*, *59*(5), 545–562. https://doi.org/10.1353/csd.2018.0052

About us. (2021). The university of Arizona: Disability resource center. Retrieved October 19, 2021, from https://drc.arizona.edu/about

ADA National Network. (n.d.). *What is the definition of disability under the ADA?* Retrieved March 15, 2020, from https://adata.org/faq/what-definition-disability-under-ada

Bretschneider, S., Marc-Aurele, F. J., & Wu, J. (2005). "Best practices" research: A methodological guide for the perplexed. *Journal of Public Administration Research and Theory*, *15*(2), 307–323.

Butler, R., & Bowlby, S. (1997). Bodies and spaces: An exploration of disabled people's experiences of public space. *Environment and Planning D: Society and Space*, *15*(4), 411–433. https://doi.org/10.1068/d150411

Carter, J., Hollinsworth, D., Raciti, M., & Gilbey, K. (2018). Academic 'place-making': Fostering attachment, belonging and identity for Indigenous students in Australian universities. *Teaching in Higher Education*, *23*(2), 243–260. https://doi.org/10.1080/13562517.2017.1379485

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson Education.

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). SAGE.

De Los Santos, S. B., Kupczynski, L., & Mundy, M.-A. (2019). Determining academic success in students with disabilities in higher education. *International Journal of Higher Education*, *8*(2), 16. https://doi.org/10.5430/ijhe.v8n2p16

Fields, C. M. 1977. Providing access for the disabled: It won't be cheap or easy. *Chronicle of Higher Education*, *14*(5).

Goering, S. (2015). Rethinking disability: The social model of disability and chronic disease. *Current Reviews in Musculoskeletal Medicine*, *8*(2), 134–138. https://doi.org/10.1007/s12178-015-9273-z

Hall, L. M., & Belch, H. A. (2000). Setting the context: Reconsidering the principles of full participation and meaningful access for students with disabilities. *New Directions for Student Services*, 5–17. https://doi.org/10.1002/ss.9101

Hoffman, H., Hengesback, M., & Trotter, S. (2020). Person-first & identity-first language: A focus on college students. *Journal of Postsecondary Education and Disability*, *33*(1), 39–48.

Madaus, J. W. (2011). The history of disability services in higher education. *New Directions for Higher Education*, *2011*(154), 5–15. https://doi.org/10.1002/he.429

Masika, R., & Jones, J. (2016). Building student belonging and engagement: Insights into higher education students' experiences of participating and learning together.

Teaching in Higher Education, *21*(2), 138–150. https://doi.org/10.1080/13562517.2015.1122585

Myers, K.A. (2017). [Review of the book *Disability in higher education: A social justice approach*, by N. J. Evans, E. M. Broido, K. R. Brown, and A. K. Wilke]. *Journal of College Student Development*,*58*(5), 792–794. https://doi.org/10.1353/csd.2017.0063

New England ADA Learning. (n.d.). *Architectural accessibility laws* [online course]. https://learn.newenglandada.org/

Safer, A., Farmer, L., & Song, B. (2020). Quantifying difficulties of university students with disabilities. *Journal of Postsecondary Education and Disability*, *33*(1), 5–21.

Scheef, A., Caniglia, C., & Barri L. J. (2020). Disability as diversity: Perspectives of institutions of higher education in the U.S. *Journal of Postsecondary Education and Disability*, *33*(1), 49–61.

Simon, J.A. (2011). Legal issues in serving students with disabilities in postsecondary education. *New Directions for Student Services*, 95–107. https://doi.org/10.1002/ss.397

Slaten, C. D., Elison, Z. M., Deemer, E. D., Hughes, H. A., & Shemwell, D. A. (2018). The development and validation of the university belonging questionnaire. *The Journal of Experimental Education*, *86*(4), 633–651. https://doi.org/10.1080/00220973.2017.1339009

Steinfeld, E., & Maisel, J. (2012). *Universal design: Creating inclusive environments*. John Wiley & Sons, Inc.

Strange, C. (2000). Creating environments of ability. *New Directions for Student Services*, 19–30. https://doi.org/10.1002/ss.9102

Strayhorn, T. (2018). *College students' sense of belonging*. Routledge. https://doi.org/10.4324/9781315297293

The ACCESS Project. (2010). *Mobility Impairments*. Colorado State University. Retrieved March 13, 2020, from http://accessproject.colostate.edu/disability/modules/MI/tut_MI.php

The United States Department of Justice. (2015, August 6). *The Fair Housing Act*. https://www.justice.gov/crt/fair-housing-act-1

Thomas, R. R. (1999). *Building a house for diversity: How A fable about a Giraffe & Elephant offers new strategies for today's workforce*. American Management Association.

United Spinal Association. (2000). *Wheels on campus: A guide to wheelchair-friendly higher education*. Retrieved April 17, 2021, from https://newmobility.unitedspinal.org/wheels-on-campus/viewer/desktop/

United States Department of Justice Civil Rights Division. (n.d.). *Introduction to the ADA*. ADA.gov. Retrieved September 26, 2020, from https://www.ada.gov/ada_intro.htm

U.S. Access Board. (n.d.). *Architectural Barriers Act (ABA) of 1968*. Architectural Barriers Act. Retrieved September 26, 2020, from https://www.access-board.gov/the-board/laws/architectural-barriers-act-aba

Vaccaro, A., Daly-Cano, M., & Newman, B. M. (2015). A sense of belonging among college students with disabilities: An emergent theoretical model. *Journal of*

College Student Development, 56(7), 670–686. https://doi.org/10.1353/csd.2015.0072

Vermeersch, P.-W., & Heylighen, A. (2015). Mobilizing disability experience to inform architectural practice: Lessons learned from a field study. *Journal of Research Practice, 11*.

World Health Organization. (n.d.). *International Classification of Functioning, Disability and Health (ICF).* Retrieved September 20, 2020, from http://www.who.int/classifications/icf/en/

Appendix A

Informed Consent

TAYLOR UNIVERSITY

INFORMED CONSENT

How Campus Mobility Effects a Sense of Belonging for the Student with a Mobility Impairment.

You are invited to participate in a research study of how your experience as a student with a mobility impairment, has shaped your sense of belonging through campus mobility. You were selected as a possible subject because you have self-disclosed your mobility impairment to the Disability Services Office at Ball State University. I ask that you read this form and ask any questions you many have before agreeing to be in the study. The study is being conducted by Taylor Treece, a Taylor University Master of Arts in Higher Education and Student Development department, 2021 candidate.

STUDY PURPOSE

The purpose of this study is to understand how campus mobility impacts a sense of belonging for the student with a mobility impairment.

NUMBER OF PEOPLE TAKING PART IN THE STUDY:

If you agree to participate, you will be one of 8-12 subjects who will be participating in this research. If you agree to participate you will be asked to conduct an individual interview with the primary researcher.

PROCEDURES FOR THE STUDY:

If you agree to be in the study, you will do the following things:

1. Agree to participate in an individual interview lasting approximately 30-60 minutes.
2. Agree to have your responses recorded during the interview.
3. Agree to be quoted and/or have your experience referenced in the results of the researcher's study under a pseudonym.
4. This study will take place during the spring 2021 semester, but your participation will simply consist of your individual interview.

RISKS OF TAKING PART IN THE STUDY:

There is minimal risk involved with taking part in this study. While participating in this study, there is the risk of discomfort or an emotional response associated with relaying negative campus mobility experiences. For this reason, participants may choose to not answer any interview question.

BENEFITS OF TAKING PART IN THE STUDY:
The full benefits to participation that are reasonable to expect are unknown, however it is reasonable to expect that reflecting on one's experiences allows more research done over the topic on disability within higher education, while also allowing the opportunity to normalize the conversation and spark curiosity to discover deeper ways to fully serve this demographic.

CONFIDENTIALITY
Efforts will be made to keep your personal information confidential, however we cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your identity will be held in confidence in reports in which the study may be published. Transcripts and recordings will be stored in a password-protected computer. Audio recordings of interviews will only be made accessible to the researcher and they will not be used for any other purpose or for any other person. Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the primary researcher and his/her research associates, the Taylor University Institutional Review Board or its designees, the study sponsor, Scott Barrett, and (as allowed by law) state or federal agencies, specifically the Office for Human Research Protections (OHRP) etc., who may need to access your research records.

PAYMENT
You will not receive payment for taking part in this study.

CONTACTS FOR QUESTIONS OR PROBLEMS
For questions about the study or a research-related injury, contact the researcher or faculty advisor:

Researcher:
Taylor Treece
taylor_treece@taylor.edu

Faculty Advisor:
Dr. Scott Barrett
scott_barrett@taylor.edu

Inquiries regarding the nature of the research, your rights as a subject, or any other aspect of the research as it relates to your participation as a subject can be directed to Taylor University's Institutional Review Board at IRB@taylor.edu or the IRB Chair, Laura Edwards, at lredwards@taylor.edu.

BALL STATE COUNSELING CENTER CONTACT INFORMATION
Hours: 8 a.m. - 5 p.m., Monday through Friday
Located: Lucina Hall, room 320

Phone: 765-285-1736
Email: counselctr@bsu.edu

VOLUNTARY NATURE OF STUDY
Taking part in this study is voluntary. You may choose not to take part or may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which you are entitled. Your decision whether or not to participate in this study will not affect your current or future relations with Ball State University.

SUBJECT'S CONSENT
In consideration of all of the above, I give my consent to participate in this research study. I will be given a copy of this informed consent document to keep for my records. I agree to take part in this study. *A copy of this consent form can be made available to you if you would like one for your records.*

□ **I certify that I am 18 years old or older**

Subject's Printed Name: _____

Subject's Signature: _____

Date: _____

Printed Name of Person Obtaining Consent: _____

Signature of Person Obtaining Consent: _____

Date: _____

Appendix B

University Belonging Questionnaire

Factor 1: University affiliation

1. I take pride in wearing my university's colors.
2. I tend to associate myself with my school.
3. One of the things I like to tell people is about my college.
4. I feel a sense of pride when I meet someone from my university off campus.
5. I would be proud to support my university in any way I can in the future.
6. I have university-branded material that others can see (pens, notebooks,
7. bumper sticker, etc.).
8. I am proud to be a student at my university.
9. I attend university sporting events to support my university.
10. I feel "at home" on campus.
11. I feel like I belong to my university when I represent my school off campus.
12. I have found it easy to establish relationships at my university.
13. I feel similar to other people in my major.

Factor 2: University support and acceptance

1. My university provides opportunities to engage in meaningful activities.
2. I believe there are supportive resources available to me on campus.
3. My university environment provides me an opportunity to grow.
4. My university provides opportunities to have diverse experiences.
5. My cultural customs are accepted at my university.
6. I believe I have enough academic support to get me through college.
7. I am satisfied with the academic opportunities at my university.
8. The university I attend values individual differences.

Factor 3: Faculty and staff relations

1. I believe that a faculty/staff member at my university cares about me.
2. I feel connected to a faculty/staff member at my university.
3. I feel that a faculty/staff member has appreciated me.
4. I feel that a faculty member has valued my contributions in class.

Appendix C

Interview Questions

Sense of Belonging (current sense of belonging)

1. What are your current attitudes/feelings towards your university? Why?
2. Do you want to be involved on campus outside of academics? Why or why not?
3. What student organizations have you joined/ wat other events/experiences have you participated in on campus?
4. Do you feel connected to staff and peers around campus? Why or Why not?

Campus Mobility (feelings towards accommodations)

5. What are your feelings towards your schools physical accommodations around campus?
6. What has your experience been traveling from one building to another?
7. Do you think the accommodations present to help you get to one place to another is sufficient currently? Why or why not?
8. Do you have any other comments/suggestions relative to accommodations?

Sense of Belonging + Campus Mobility (do these influence each other?)

9. Has your schools physical accommodations or lack of physical accommodations influenced your attitudes/feelings towards your university?
10. Do these physical accommodations help you feel known or seen on campus? Why or why not?
11. Do these physical accommodations influence you to want/or not want to participate in activities on campus?