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Adults With Disabilities: What Factors Create a Successful Transition from Higher Education to the Workforce?

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ABSTRACT

Individuals with disabilities face difficulties in both higher education and the workforce. While it would seem that they would be equipped to deal with these difficulties, high levels of college dropouts as well as pay gaps and high levels of underemployment suggest otherwise. Although there are many studies on disabilities and its relationship to singular factors, there is a lack of empirical study on the holistic relationship between disabilities and multiple factors. The purpose of this study is to explore how environmental factors, individual-external factors, and individual-internal factors are related to a successful transition from higher education to the workforce among study population. This cross-sectional study used survey responses of a convenience sample of 25 adults with disabilities who had previously been enrolled at a faith-based university in Texas. A hierarchical linear regression analysis was conducted to explore the impact that each factor has on the outcome variable. Although individual-internal factors and individual-external factors influenced the outcome, they did not have a significant effect. Among the group of environmental factors, campus climate and utilization of accommodations both had a significant relationship with a successful transition to the workplace. The findings show that campus climate was the strongest predictor, meaning that campus climate had a higher impact than utilization of accommodations. These findings suggest that institutions of higher education need to focus their policy and practice related to students with disabilities on the topics of improving campus climate and ensuring that accommodations are available to be utilized by students. Further

investigation is needed to validate these findings using an experimental study with a representative sample.

Adults With Disabilities: What Factors Create a Successful Transition from Higher

Education to the Workforce?

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CHAPTER I

INTRODUCTION

Problem Statement

Disabilities are prevalent worldwide, as recent studies show that people with disabilities make up between 15 and 19% of the adult population across the globe (Schur et al., 2016; World Health Organization [WHO] and World Bank., 2011; Zhang et al., 2019). In the United States alone, it is estimated that 12.9% of the population aged 21–64 have reported disabilities (Cornell University StatsRRTC., 2007; Solovieva et al., 2010). Additionally, in a study performed by Newman et al. (1996), the highest prevalence of psychiatric disorders exists in the age range of 15–21 years old, with a rate of 39% of all those surveyed. While it is important to understand that disabilities are prevalent not only in the United States but also worldwide, it is critical to note that functional capacities within specific disabilities can and do vary depending on the individual.

The literature shows that each year, increasing numbers of young adults with disabilities are moving onto college campuses to pursue a degree in higher education (Heath, 1999; Francis et al., 2018; Hurtubis Sahlen & Lehmann, 2006; Smith, 2007). According to three separate studies, the number of students with disabilities attending higher education has tripled within the last 10–20 years (Carney et al., 2007; Olney et al., 2004; Plotner et al., 2020). The exact percentage of students with disabilities attending higher education varies from 9% of all college students (Barnard-Brak et al., 2010; Bryan

& Myers, 2006; Enright et al., 1996; Hartman, 1993; Henderson, 1992) to 19% of all college students (National Council on Disability, 2011; Oswald et al., 2015), with the majority of studies reporting 10% (Carney et al., 2007; Chiu et al., 2019; Snyder & Dillow, 2015) or 11% (Huber et al., 2016; Madaus, 2011; National Center for Education Statistics., 2009; U.S. Department of Education: National Center for Education Statistics, 2013).

While there has been an increase in the presence of individuals with disabilities in higher education institutions (Shaw et al., 2009), the educational outcomes for these individuals can be catastrophic due to the high level of dropout rates and failures to secure gainful employment after graduation (Horn et al., 1999; Shaw & Dukes, 2005). For the students with disabilities who do manage to graduate from higher education institutions, they will face underemployment as well as gaps in pay when compared to their peers without disabilities (Barnard-Brak et al., 2010; National Center for Education Statistics, 1999; Zhang et al., 2019). The employment rate of adults with disabilities is consistently found to be under 38% (Cornell University StatsRRTC, 2007; Solovieva et al., 2010), with the employment rate for adults with psychiatric disabilities ranging from 11.7-30.0% (Collins & Mowbray, 2005). According to a study conducted by Legnick-Hall et al. (2008), during the year 2005 only 1.8 million out of 21.5 million working-age adults with disabilities were employed full time.

Research Gap

There have been multiple studies on the factors related to success among people with disabilities in workplaces, colleges, or the transition from higher education to the workforce. Those investigations include (1) the relationship between demographic

information and employment, (2) the effectiveness and best practices for transition strategies, (3) the relationship between self-advocacy interventions and individuals with disabilities, or (4) the relationships between self-advocacy involvement and employment. However, few studies have thoroughly and holistically investigated the factors of successful transition to the workforce.

Present Study

This research seeks to close the gap by answering the following research question: What are the factors for successful transitions from higher education to the workforce among individuals with disabilities? This study will examine the effect of the following factors of successful transition, which have been identified from the literature: environmental factors (e.g., utilization of accommodations, disability services, and campus climate), individual-external factors (e.g., familial support and peer support), and individual-internal factors (e.g., self-determination, self-advocacy, and self-efficacy). Additionally, this study will examine the level of institutional support in the current workplace.

CHAPTER II

LITERATURE REVIEW

Literature Review Search Strategy

The following literature review aims to examine and discuss the factors that influence and create a successful transition from higher education to the workforce for adults with disabilities. To obtain articles for this literature review, a search of existing literature was conducted using EBSCOhost journal database. Peer-reviewed articles published in academic journals from 1985 to 2020 were included. The researcher used filters within the ACU Brown Library OneSearch Database to ensure that the sources to be utilized were peer-reviewed. Search terms that were used include the following: "disabilities in higher education," "disabilities in the workplace," "accommodations in higher education," "accommodations in the workplace," "transition from higher education to the workforce," "adults with disabilities" or "college students with disabilities" or "students with disabilities" and "college students" and "graduation" or "completion" or "academic success" and "transition," "adults with disabilities" or "college students with disabilities" or "students with disabilities" and "college students" and "attitude" or "belief" or "self-efficacy" or "efficacy" or "self-advocacy" or "self-advocate" or "self-perception." All of the articles referenced in this review met the inclusion criteria: 1) the study must be written in English, 2) the study outcome was related to people with disabilities, higher education, the work force, or the transition between the two, and 3) the study outcome was comparable to other studies.

Definition of Disability and Related Policy

The word *disability* has a variety of definitions, all within the same realm of meaning. Barnes et al. (1999) define *disability* as a "loss or limitation of opportunity to participate in social life due to physical barriers" (p. 153). Barnard and Lan (2007) state that "disability is defined as an impairment or lack of ability that limits a major life activity but allows for gainful employment" (p. 1). These definitions are somewhat different from Barnard-Brak, Lechtenberger, and Lan (2010), as they define *disability* as "a physical or mental impairment that substantially limits one or more of the major life activities of an individual" (p. 411). The definition that will be used for the purpose of this thesis is the one provided by the Americans with Disabilities Act (ADA), which characterizes *disability* as "a physical or mental impairment that substantially limits one or more major life activities" (ADA, 1990; Solovieva & Walls, 2013). No disability affects two individuals the exact same way, and no two individuals react to the loss of ability in the same way (Brodwin et al., 1996; Enright et al., 1996).

Originally passed in 1975, the Individuals with Disabilities Education Act (IDEA) evoked a less stigmatized, more positive reaction related to individuals with disabilities by creating an understanding and foundation that individuals with disabilities can be and are functional and successful contributors to society (Taylor, 2011). Since the implementation of the IDEA, many other legislations have been passed in hopes of decreasing discrimination against individuals with disabilities. The ADA was passed under the Bush administration to "mark an era of empowerment" (Price et al., 2003. p. 350). These legislative acts, including the IDEA and ADA, have increased the attendance of individuals with disabilities at higher education institutions (DeLee, 2015; Shaw et al.,

2009). Section 504 of the Rehabilitation Act of 1973 is specifically relevant to the educational side of individuals with disabilities (Dukes & Shaw, 1998; Parker et al., 2003).

The category of "disability" can include many people with vastly different situations and perspectives (Taylor, 2011), including individuals with non-apparent disabilities. *Non-apparent disabilities* refer to psychiatric disabilities, attention deficit disorders, learning disabilities, and others that may not have a physical aspect of the disability (Kranke et al., 2013). The literature has shown that it is of extreme value to view disability through a lens of social, cultural, and political phenomena rather than treating students as if they have a problem or condition that can be cured or fixed (Taylor, 2011).

Hardships that Individuals with Disabilities Face

Individuals with disabilities face hardships including discrimination in all aspects of their lives. Two specific areas of their lives that the literature addresses include hardships and difficulties in the workplace, as well as hardships and difficulties in higher education.

Difficulties in the Workplace

Obtaining accommodations in the workplace can be a difficult process for people with disabilities. There are many reasons that a person with disabilities may refrain from requesting accommodations. In a study by Price et al. (2003), 19 out of 25 people with disabilities had minimal knowledge about their rights under the ADA and the benefits that it could provide in the workplace. Twenty of the interviewees reported that they were not comfortable discussing their disability due to anxiety that they may be denied the

position. Employees with disabilities may also refrain from disclosing information about their disabilities to their employers on account of the stigma related to disabilities and the embarrassment that can be a result of this stigma (Allaire et al., 2003; DelPo Kulow & Missirian, 2019; Dong et al., 2016). While stigma is a large factor in the lack of disclosure and the underutilization of accommodations, people with disabilities are also concerned about their image and being labeled as dependent, incompetent, and unproductive, as they do not want to create any burden or social obligation on other employees (Colella et al., 1998; Kulkarni, 2013; Louvet et al., 2009; Legnick-Hall et al., 2008; Price et al., 2003). Another difficulty in the accommodation process for the workplace is that accommodations that were required in the school setting may not be required in the workplace setting when cost and undue burden are analyzed and considered (DelPo Kulow & Missirian, 2019). This process can be even harder for people with psychological disabilities, or unseen disabilities, due to the lack of visibility of their disability (Telwatte et al., 2017). However, this can be harmful to people with disabilities because if accommodations are not used or requested, the employee's talents are more likely to go unrecognized and be underutilized (Dong et al., 2016; Frank & Bellini, 2005).

In the workplace, people with disabilities are discouraged from asking clarifying questions, seeking guidance, or engaging in other proactive activities due to the potential that it could be perceived by their peers as incompetence and excessive dependence (Baldridge & Viega, 2001; Kulkarni, 2013; Kulkarni & Legnick-Hall, 2011; Lee, 2002). Similarly, if a person with disabilities is entitled to an accommodation to assist in the completion of their work, their peers may see that as an unfair advantage, creating a more

stigmatized and less integrated workplace (Colella, 2001; Kulkarni & Legnick-Hall, 2011). In a stigmatized and less integrated workplace environment, many coworkers will have less interaction with their peers with disabilities, leading to lower rates of acceptance and making it less likely that they will assist the employees with disabilities in gaining mastery over tasks related to work. In this non-integrated environment, people with disabilities are less likely to be involved in the personalized, friendly conversation and are more likely to only be involved in conversations regarding tasks and the workplace (Jones, 1997; Kulkarni & Legnick-Hall, 2011). According to Louvet et al. (2009), people with disabilities are more likely to describe themselves as competent to gain professional relationships, although their peers may see them as lacking in competence but displaying traits reflecting warmth. When people with disabilities self-handicap and limit themselves in the workplace to appease their non-disabled coworkers, they are hurting themselves as they limit their learning, engagement, and productivity, which leads to higher levels of unhappiness in the workplace (Klimoski & Donahue, 1997; Kulkarni & Legnick-Hall, 2011).

Difficulties in Higher Education

In comparison to their peers without disabilities, students with disabilities have an extraneous number of barriers that they face in higher education. Students may be confused due to the difference between accommodations in secondary and postsecondary education as well as not being educated about the services and resources available to them at the postsecondary level (Collins & Mowbray, 2005; Eckes & Ochoa, 2005; Francis et al., 2014; Francis et al., 2018; Kranke et al., 2013; White et al., 2014). Students with disabilities appear to be more prone to experience stress, depression, and insecurity

when thinking about their academic stress, which can lead to higher course failure rates and lower graduation rates (Francis et al., 2019; Gelbar et al., 2020; Horn et al., 1999; Lombardi et al., 2016). According to many sources, one of the biggest environmental barriers that students with disabilities face is the lack of knowledge surrounding disabilities, disability services, and accommodations by peers, faculty, and staff (Barnard-Brak et al., 2010; Collins & Mowbray, 2005; Greenbaum et al., 1995; Weiner & Weiner, 1996). Students with disabilities also struggle to overcome barriers of perceived incompetence by others due to the presentation of disabilities (e.g., lack of ambition, laziness, and low cognitive abilities) (Cosden & McNamara, 1997).

Often, students with disabilities who attend higher education will not attain their higher education goals. Despite the rather large increase in individuals with disabilities attending colleges and universities, their graduation rates consistently fall behind those of their peers without disabilities (Anastopoulos & King, 2015; Francis et al., 2019). The U.S. Department of Education National Center for Education Statistics exemplified this with their study results that while 57% of students in the general population of universities will receive their bachelor's degree within six years of attending school, only 34% of individuals with disabilities are able to achieve this (2014). More than 50% of students with disabilities either do not return to the institution after their first year or have left by the third year (DeLee, 2015). In students who have psychiatric disabilities, the withdrawal rate is 86% (Collins & Mowbray, 2005; Kranke et al., 2013), one of the highest withdrawal rates in higher education.

People with disabilities generally have similar life goals when compared to non-disabled people. These life goals can include attending school, graduating, participation

in the community, the acquisition of employment, and overall economic security (Henderson, 2001; Shaw & Dukes, 2005). However, people with disabilities are less likely to achieve these life goals if they do not possess adaptive skills (DelPo Kulow & Missirian, 2019). Adaptive skills are created and enforced through developmental milestones, such as independence, identity formation, and intimacy, which are generally milestones that are achieved later in life for people with disabilities (Kranke et al., 2013; Leavey, 2005). The lack of these skills, along with the late development in many aspects of life can cause feelings of shame and anger, leaving people with disabilities with a sense of impaired social identity (Cuevas et al., 2019; Tye-Murray et al., 2009).

Policies for Addressing Hardships

Individuals with disabilities seem to be a minority in both the workplace and in higher education institutions. Because of the discrimination that most minorities face, the ADA and the Americans with Disabilities Act Amendments Act (ADAAA) place pride in their efforts, which can have both positive and negative impacts, to diminish discrimination in both the workplace and in higher education institutions (Louvet et al., 2009).

Disabilities in the Workplace

The literature suggests that people with disabilities are a minority in the workplace (Kulkarni & Legnick-Hall, 2011; Legnick-Hall, 2007; Shore et al., 2009). In fact, this population represents "the nation's largest minority and considerably largely untapped pool of labor" (OECD, 2011. p. 57). Discrimination against people with disabilities in the workplace is mitigated by the demand that "organizations with 15 or more full-time employees make reasonable accommodation for employees with

disabilities asking for help, if the accommodation does not place undue hardship on the organizations" (ADA, 1990). People with disabilities have a much lower employment rate when compared to their non-disabled counterparts, generally due to an employer's hesitation to hire someone with disabilities—even if the person with disabilities had qualifications similar or even better than applicants without disabilities (Ameri et al., 2015; OECD, 2011; Schur et al., 2016; Zhang et al., 2019). Even when people with disabilities are hired into the workplace, they are paid on average 10% less than their non-disabled counterparts and run a higher risk of losing their jobs with men who have disabilities 75% more likely and women with disabilities 89% more likely to be fired when compared to men and women without disabilities (Schur et al., 2016).

For people with disabilities to be successful in the workplace, there needs to be a positive, nondiscriminatory environment (Wilton, 2004), as well as connections and relationships between the person with disabilities and the employer or coworker in a supervisory role (Kulkarni & Legnick-Hall, 2011; Price et al., 2003). If these connections and relationships are created before the employee with disabilities is hired, the attitude of both employees and supervisors are expected to be more positive, which will lead to higher job satisfaction and relational acceptance (Borgatti & Cross, 2003; Kulkarni, 2013). These positive attitudes exemplified by employers and supervisors towards the employee with disabilities will relieve pressure in the workplace which leads to higher rates of successful integration, resulting in people with disabilities achieving desired levels of job performance and having increased satisfaction rates with their employment (Kulkarni & Legnick-Hall, 2011; Schur et al., 2016). The effect from these positive attitudes creates a positive workplace culture that will support the overall success of the

organization by increasing retention rates and facilitating an environment of compliance and inclusion that will also lead to a lower risk of charges including discrimination and other workplace violations (Bjelland et al., 2010; Solovieva & Walls, 2013).

Disabilities in Higher Education

With the increasing number of disability support service offices in institutions of higher education, it would be easy to assume that students with disabilities are actively pursuing higher education at an increasing rate. While this may be somewhat true, individuals with disabilities do not attend college at the same rate as their peers without disabilities due to the struggles in transition, lack of support, and lack of knowledge about the disability services departments (Francis et al., 2018; Madaus, 2005; National Center for Education Statistics, 2016; Plotner et al., 2020; Ross et al., 2013). There are many benefits to attending higher education institutions. These benefits include, but are not limited to, increased contribution and activity in the community, higher salaries once hired, lower divorce rates, and healthier overall lifestyles (Hout, 2012; Plotner et al., 2020). Specifically, for individuals with disabilities, the higher the education level, the more autonomy that is developed (Cuevas et al., 2019; Weisel & Kamara, 2005).

Resources Available to Address Hardships and Aid for Success

Adults with disabilities are affected by hardships in both higher education and in the workforce. Luckily, there are resources available to address these hardships for individuals with disabilities. There are also resources available to aid these individuals in their success.

Accommodations in the Workplace

As previously mentioned, the ADA demands that reasonable accommodations be granted to people with disabilities in the workplace, while the Equal Employment Opportunity Commission (EEOC) evaluates organizations and workplaces for their compliance with the ADA (ADA, 1990; DelPo Kulow & Missirian, 2019; Dong et al., 2016). *Workplace accommodations* can be defined in a variety of ways but include any adjustments or modifications made to the job, labor process, or work environment (Dong et al., 2016; Wilton, 2004). These can include, but are not limited to, adjusting work schedules, telephone amplification, ergonomic equipment adaptations, special lighting, modifications to the job duties/descriptions, alterations to office furniture or space, sign-language interpreters, flexible leave, adaptive and assistive technologies, and arranging special transportation (Barnes, 2000; Rowlingson & Berthoud, 1996; Solovieva et al., 2010; Solovieva & Walls, 2013; Wilton, 2004). The role of workplace accommodations is to provide supportive services that might be needed to successfully integrate people with disabilities into the workplace environment (Solovieva et al., 2010; Solovieva & Walls, 2013).

Two of the most expected attributes of a person with disabilities in the workplace are self-advocacy and self-disclosure (Gerber & Brown, 1996; Price et al., 2003). Without these attributes, an employer or supervisor would never know that the employee has a reason to require assistance. These attributes are less likely to appear in individuals who feel undermined or undervalued. According to Price et al. (2003), 12 out of 25 people with disabilities stated that they were not knowledgeable enough about their own diagnosis/disability to advocate for themselves. When such individuals are not able to

engage in self-advocacy in the workplace, they are more likely to be taken advantage of. On a similar note, individuals who feel empowered and enthusiastic about the accommodation process in the workplace are more likely to express intent to request assistance and accommodations (Dong et al., 2016). The accommodation process can vary from workplace to workplace, as the approval of accommodations can depend on many factors such as the employee's attitude, the accommodation being requested, the employer's attitude, and the burden that the accommodation might cause (Allen & Carlson, 2003; Colella et al., 2004; Gouvier et al., 2003; Telwatte et al., 2017). Generally, workplace accommodations do not provoke any costs, or the costs are minimal (Solovieva & Walls, 2013), but the employer has the right to deny any accommodations that create an undue hardship, whether that be through disproportionate expenses or unfair burden on coworkers or other employees (DelPo Kulow & Missirian, 2019).

Disability Services in Higher Education

Section E of Section 504 of the ADA (ADA, 1990) requires all institutions of higher education to provide reasonable academic accommodations for students, faculty, and staff who present documentation of disabilities (Barnard-Brak et al., 2010; Bryan & Myers, 2006; Collins & Mowbray, 2005; Konur, 2006; Madaus, 2011; Schur et al., 2016; Zhang et al., 2019). These accommodations serve as a platform to stimulate and facilitate equity, inclusion, and accessibility (Chiu et al., 2019). To comply with these requirements from the ADA, most institutions will have a disability services office that focuses on these goals (Taylor, 2011). The guidelines for documentation that students, faculty, or staff need to provide can vary according to the individual institution's policies and guidelines (Hurtubis Sahlen & Lehmann, 2006; Kincaid, 1997; Madaus & Shaw,

2006). Disability services departments should partner with all departments on campus to increase awareness and educate the campus community, create a welcoming and inclusive environment, and to advocate for students' needs while they learn to advocate for themselves (Bryan & Myers, 2006; DeLee, 2015; Kranke et al., 2013). Disability support specialists and higher education professionals have the moral obligation to provide and ensure that all students have access to supports and services that are needed (Shaw & Dukes, 2005), provide support and services from the beginning to the end of each student's higher education career (DeLee, 2015), establish rapport with students to make them feel comfortable and accepted (Barnard-Brak et al., 2010), and integrate the community and accommodations into students' academic life (DeLee, 2015).

Importance of Successful Transition from Higher Education to the Workplace

While there are many laws and regulations for people with disabilities in grade school, higher education, and the workplace, there are no formal transition policies in place to help people with disabilities make these transitions (Francis et al., 2018; Francis et al., 2016). The majority of theories regarding decision-making skills assume that all individuals are constantly exposed to experiences related to career choices; that is not the experience of people with disabilities and therefore does not apply to them (Enright et al., 1996). In fact, many people with disabilities are not aware of the resources available to aid them in seeking employment due to their lack of ability to communicate and provide examples of their skill sets (Lindsay, 2011; Oswald et al., 2015). In a study conducted by Price et al. (2003), none of the 25 subjects utilized counselors, professors, or any other professional resources to assist in their first gainful employment after graduating from higher education. Generally, when students with disabilities leave the environment of

higher education where support is readily available, they are unable to explain the accommodations and help they may need as they do not fully understand their strengths and weaknesses enough to explain them to a potential employer (Izzo & Lamb, 2002; Test et al., 2005).

Although the act of completing a degree from a higher education institution increases rates of employment as well as social status (Plotner et al., 2020; Sachs & Schreuer, 2011), the rate of people with disabilities who attend and graduate from higher education is extremely disproportionate when compared to their non-disabled peers (Enright et al., 1996; Francis et al., 2018; Trostel, 2015; van Bergeijk et al., 2008). It has become evident that attending and graduating from a higher education institution is a critical factor in the transition from school to work and the successful acquisition of gainful employment (Cook et al., 2000). Even when people with disabilities graduate from a higher education institution, their employment rates fall very low compared to people without disabilities, with the employment rates being 52.7% for graduates with disabilities versus 83.7% for graduates without disabilities (Erickson et al., 2014; Huber et al., 2016; Lindstrom et al., 2011; O'Day & Foley, 2008; Oswald et al., 2015; U.S. Department of Education: National Center for Education Statistics, 2014). Unfortunately, one factor in these disproportionate employment rates is that people with disabilities often do not realize the number of benefits associated with successfully securing gainful employment (Lindstrom et al., 2011; National Organization on Disability, 2004). A second barrier to employment for people with disabilities are personal limitations (Enright et al., 1996), as people with disabilities are at a higher risk for issues such as depression, stress, and anxiety during these transitions (Cooray & Bakala, 2005; Plotner

et al., 2020). People with disabilities also often struggle with self-esteem as they are not capable of recognizing their ability to succeed and therefore lack the confidence to put themselves out there for employment (Enright et al., 1996).

Factors that Create a Successful Transition

One model to follow in understanding what creates a successful transition from higher education to the workforce includes the social-environment model. This model emphasizes that human abilities along with gainful self-support are the most important factors to consider when trying to understand an individual's development and success (Gates, 2000; Solovieva & Walls, 2013). Many factors can influence and help to create a successful transition from higher education to the workforce for all students. These factors include, but are not limited to, a sense of belonging, one's perception of self, self-esteem, the ability to advocate for oneself, self-efficacy, and career expectations (Chiu et al., 2019; Field et al., 2003; Herbert et al., 2014; Lindstrom et al., 2011; Wehmeyer & Schwartz, 1997). Another factor that influences a successful transition, perceptions of self-worth, is affected by cognitive abilities, feedback from others, vocational skills, and physical appearance (Cosden & McNamara, 1997). The literature shows that the most important factors for the success of students with disabilities are environmental factors (Herbert et al., 2014), self-esteem (Cosden & McNamara, 1997), peer relationships (DeLee, 2015), and social networks (Thomas, 2000).

Institutional Support

Institutional support can be synonymous with *environmental factors*, which, for the purpose of this study, are defined as factors over which individuals have no exclusive

control. These factors can include but are not limited to utilization of accommodations, disability services departments, and campus climate.

Use of Accommodations in Higher Education

Title III of the ADA mandates that "goods, services, facilities, privileges, advantages, and accommodations will be afforded to an individual with a disability in the most integrated setting appropriate to the needs of the individual" (ADA, 1990; Enright et al., 1996). By integrating services and providing them in the least intrusive manner possible, the student's attention can be placed on their academic success rather than their disability and accommodations (Conyers, 1996; Enright et al., 1996; Szymanski, 1994). While it can be intimidating and scary to self-disclose a disability, students in higher education are required to self-identify as having a disability and advocate for themselves to receive accommodations (Barnard-Brak et al., 2010; Bryan & Myers, 2006; Hadley, 2007; Madaus & Shaw, 2006; Pfeifer et al., 2020; Torkelson et al., 1996; White et al., 2014). Hartman's (1993) results showed that only 1–3% of all students with disabilities on campus will follow through with requesting accommodations due to the intimidation, stigma, and fear that they feel. Because each student will manifest their disability differently and have unique and distinct needs (Barnard-Brak et al., 2010; DeLee, 2015), it has become increasingly more complicated for disability services offices to determine what qualifies as "reasonable accommodations" (Collins and Mowbray, 2005; Wilk, 1993), as each student needs individualized services to succeed (Shaw & Dukes, 2005; Shaw, in press).

The accommodations that can be provided by disability service offices can vary widely. Accommodations that can be used for testing include, but are not limited to,

extended time, distraction-reduced environment, private room for testing, alternative

testing format, reader for exam, or scribe for exam (Chiu et al., 2019). Accommodations

that can be used in the classroom can include, but are not limited, to preferential seating,

recording lectures, accessible aids, adapted classroom equipment, instructional

adaptations, note-taker in class, copies of presentation slides, and extended time to

complete assignments (Chiu et al., 2019; Francis et al., 2019). Some accommodations

that can be provided are not associated with classroom or testing accommodations, but

rather focus on the student. These services can include supplemental instruction, career

counseling, resource identification, and academic coaching (Chiu et al., 2019). Students

have reported through multiple studies that once they received the appropriate

accommodations from the disability services office, they felt empowered and were more

likely to succeed in their academic careers (Collins & Mowbray, 2005; Francis et al.,

2019; Kranke et al., 2013). Some students also reported that they felt empowered in the

long-term when professors and educators would provide even greater degrees of support

by going beyond the minimal requirements of accommodations (Francis et al., 2019).

Disability Services

When disability service offices are active in their presence on campus and can

promote inclusivity and acceptance to faculty, the faculty are more likely to understand

that the challenge is not the student, but the disability (Carney et al., 2007), leading these

faculty and staff members to be more accommodating and patient with students. Faculty

and staff who are accommodating are extremely critical to students with disabilities

success, as collaboration is a fundamental aspect of their academic success (DeLee,

2015). The literature also shows that students who meet on a regular basis with the

disability services office, professors one-on-one, peer leaders, and tutors are more likely to succeed and have a higher GPA than those who do not take advantage of the support that is available (Chiu et al., 2019; DeLee, 2015; Getzel et al., 2004).

Campus Climate

Environmental factors in higher education institutions that are integrated for success include campus climate and attitude, specified disability related policies, support groups, and physical location and accessibility of the campus (Herbert et al., 2014). Students who take advantage of relationships and collaboration with their peers, social networks, and campus organizations are more likely to succeed, experience higher academic success, and have higher self-esteem (Cosden & McNamara, 1997; DeLee, 2015; Lombardi et al., 2016; Thomas, 2000). These peer and organizational relationships are needed to create and receive support in areas, such as moral, emotional, and social support (Francis et al., 2019).

With the transition to higher education already being extremely critical for individuals with disabilities, they are then charged with the tasks to take initiative and advocate for themselves (DeLee, 2015; DelPo Kulow & Missirian, 2019), as every student with disabilities will have varying levels of needs and support based on their diagnosis (Barnard-Brak et al., 2010) and their perception of the disability (Enright et al., 1996). The students' ability and decision to self-disclose their disability and to actively pursue services available to students with disabilities is an integral part of self-determination theories related to students with disabilities (Gelbar et al., 2020; Madaus et al., 2011). Students who do not plan and learn how to advocate for themselves and their needs will likely fail to succeed (DeLee, 2015).

Individual-External Factors

In the academic environment, social support has been shown to have numerous benefits. Peer support and social support groups or social skills groups can foster relationships and positively impact academic achievement as well as the feelings students have about their success (Lombardi et al., 2016). According to Lombardi et al., it is not only the act of having peer support that helps students' academic success, but it is also the quality of relationships present. These quality relationships and social support have helped buffer negative effects of low efficacy levels and low self-reports on educational outlooks (2016). Generally, the more social support a student receives and the more included and integrated they feel, the higher the chances are that they will successfully complete their degree (Enright et al., 1996; Heath et al., 1991). In the environment outside of school, the social problems that people with disabilities face can be exasperated by the negative attitudes of peers (Harper, 1999; Mishna et al., 2011). On the other hand, people with disabilities who report having a high level of peer support and positive experiences, including familial support, tend to report higher levels of success in their adult lives including factors such as increased self-determination, hope, and sense of control (Fleming et al., 2017; Gresham et al., 2001; Lombardi et al., 2016; Mishna et al., 2011).

Individual-Internal Factors

For the purpose of this study, individual-internal factors are defined as factors that are determined solely by the individual. These factors may be affected by external factors or predispositions but are more heavily influenced by the individual's mindset and purposefulness.

Self-Determination

The acquisition of self-determination skills has been proven to positively impact the likelihood of people with disabilities having success in employment post-graduation (Test et al., 2005; Wehmeyer & Schwartz, 1997). Self-determination can be defined many ways, but most commonly is defined as having the capacity to recognize one's interests, needs, strengths, and weaknesses and taking responsibility for their own goals while advocating for themselves (Durlak et al., 1994; Field et al., 1997; Field et al., 2003; Merchant & Gajar, 1997; Mishna et al., 2011; Wehmeyer et al., 2000). Self-determination evolves over one's lifespan in concurrence with ecological context and a person's interactions with others and their environment (Mishna et al., 2011). According to White et al., having self-awareness is the first step in fostering self-determination (2014). In people with disabilities, it is extremely important to have the skills of self-determination. Self-determination presents itself as the ability to identify goals, problem-solve effectively, the ability to experience a quality of life consistent with the person's own values, strengths, and needs, and the ability to have control over their own life to successfully transition to adulthood (Field et al., 2003; Mishna et al., 2011; Pennell, 2001; Turnbull & Turnbull, 2001; Wehmeyer & Palmer, 2003; White et al., 2014). Another important component of self-determination is self-advocacy, as both skills are associated with success later in life (Field et al., 1997; Field et al., 1998; Merchant & Gajar, 1997; Mishna et al., 2011; Test et al., 2005).

Self-Advocacy

Field's literature shows that there is an overlap between self-advocacy and self-determination and explains that self-advocacy should be seen as an ability as well as a

movement (1996). Similar to many other concepts, *self-advocacy* can have a variety of definitions, but most of them agree that *self-advocacy* is defined as an individual's ability to assertively state their wants and needs, effectively communicate, convey, negotiate and assert their own interests and rights, determine and pursue supports that are needed, and gather information to acquire help in meeting their personal needs that they are entitled to per the law (Balcazar et al., 1991; Getzel, 2008; Izzo & Lamb, 2002; Merchant & Gajar, 1997; Mishna et al., 2011; Pfeifer et al., 2020; Van Reusen, 1996; White et al., 2014). Self-advocacy is described as a complex of both knowledge and skills which has a foundation of knowledge of self, their interests, needs, preferences, learning style, and type of disability, as well as their rights as an individual with disabilities (Abery et al., 1995; Test et al., 2005). There are many variables of self-advocacy, including academic advocacy, community advocacy, employment advocacy, and independent living advocacy (Zhang et al., 2019). There are also many components of self-advocacy, including knowledge of self, knowledge of rights, communication, and leadership regarding the needs of self (Test et al., 2005; Zhang et al., 2019). Leadership plays an important role in self-advocacy, as it involves learning the roles and dynamics of a group and helps a person to move from individual self-advocacy to advocating for others as a group of individuals with familiar concerns, problems, and goals (Test et al., 2005). An important part of self-advocacy is the communication between an individual and their peers, mentors, family, employers, and other individuals. This communication has to be done carefully to include assertive, but not aggressive communication which involves effective negotiation, persuasion, body language, compromise, and listening skills (Nezu et al., 1991; Pfeifer et al., 2020; Test et al., 2005; Wehmeyer & Lawrence, 1995).

Self-advocacy theory states that a higher level of self-advocacy undoubtedly leads to better adult outcomes, including successful education and overcoming barriers to getting hired (Jans et al., 2012; Getzel & Thoma, 2008; Solovieva & Walls, 2013; Test et al., 2005; Wehmeyer & Schwartz, 1997; Zhang et al., 2019). Self-advocacy is extremely important for students with disabilities in higher education, as it helps students to achieve better outcomes both in school and post-school by helping to maintain a similar level of awareness about rights and needs (Agarwal et al., 2014; DelPo Kulow & Missirian, 2019; Oswald et al., 2015; Test et al., 2005; Zhang et al., 2019). Unfortunately, not many studies examine how well people with disabilities engage in self-advocacy (Fleming et al., 2017; Pfeifer et al., 2020). With all of the benefits that come with self-advocacy, it is important that self-advocacy skills are developed at a younger age as it becomes more difficult to develop these skills as an adult (Izzo & Lamb, 2002; Test et al., 2005; Wehmeyer, 1992; White et al., 2014).

Self-Efficacy

While it may be a common misconception that self-advocacy and self-efficacy are similar, the literature shows that they do not correlate and are interpreted to be domain specific (Cuevas et al., 2019; Kelly-Campbell & McMillian, 2015). According to Cuevas et al. (2019) it has been understood that self-efficacy has a strong relationship with the success in higher education, gainful employment, and the transition between the two. In every individual, self-efficacy is developed at a young age as children are positively reinforced when they complete tasks correctly and begin to believe in themselves and their abilities. The development of self-efficacy can be influenced by many factors, including feedback from others, a personal judgement of other people's successes, prior

experiences in successfully completing tasks, and inferred feedback from physical and emotional reactions from other people regarding their performance of a task (Bandura, 1997; Cuevas et al., 2019). An individual's belief in their own self-advocacy can influence their career decisions, educational achievements, social interactions, and overall quality of life (Bandura et al., 2001; Cuevas et al., 2019). However, due to the lack of available accommodations, in people with disabilities, they are taught at a young age to use their self-efficacy as a point of resilience as they may not have any other people to lean on (Cuevas et al., 2019; Young et al., 2008).

Conclusion to Literature Review

The literature review suggests that many individuals with disabilities rely on outside resources, such as disability resources, accommodations, and social support, as well as internal resources, such as self-determination, self-advocacy, and self-efficacy, to succeed in higher education and the workforce. The transition between the two rely on these factors to be successful. This study has developed the following conceptual model of factors of a successful transition from higher education to the workplace.

Figure 1

Conceptual Model of Factors Affecting a Successful Transition from Higher Education to
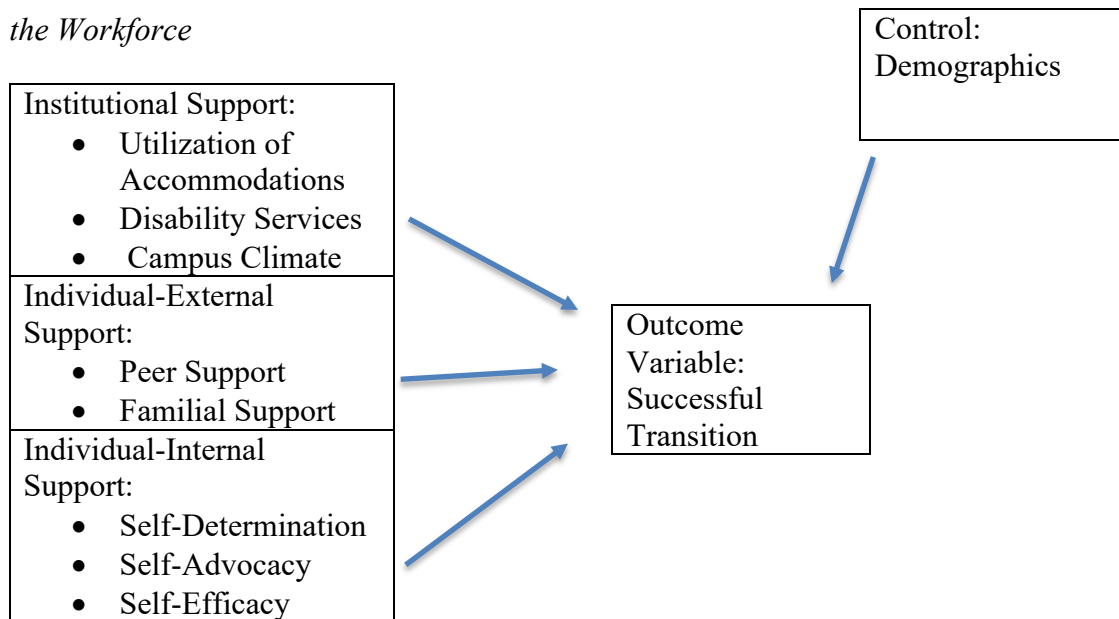
the Workforce

This conceptual model includes the following hypotheses:

- Hypothesis 1-1: Individuals who report higher levels of use of accommodations will be more likely to transition to the workforce successfully.

- Hypothesis 1-2: Individuals who report higher levels of interaction with disability services will be more likely to transition to the workforce successfully.

- Hypothesis 1-3: Individuals who experience more positive campus climates will be more likely to transition to the workforce successfully.

- Hypothesis 2-1: Individuals with higher levels of peer support will be more likely to transition to the workforce successfully.

- Hypothesis 2-2: Individuals with higher levels of familial support will be more likely to transition to the workforce successfully.

- Hypothesis 3-1: Individuals with higher levels of self-determination will be more likely to transition to the workforce successfully.

- Hypothesis 3-2: Individuals with higher levels of self-advocacy will be more likely to transition to the workforce successfully.

- Hypothesis 3-3: Individuals with higher levels of self-efficacy will be more likely to transition to the workforce successfully.

CHAPTER III

METHODOLOGY

Introduction to the Methodology

The purpose of the present study is to investigate what factors help to create a successful transition from higher education to the workforce in adults with disabilities. This empirical study tested the hypotheses included in the conceptual model that has been developed based on the literature review.

Research Design

This study utilized a cross-sectional retrospective design in the form of a survey. Cross-sectional research is conducted when the investigator wishes to measure the outcome and the exposures in the study participants simultaneously (Setia, 2016). Although the survey itself was conducted at one point in time, the survey has been designed to collect data from different time points: factors while they attended higher education and the transition after graduation. This time difference in the data may address limitations of a cross-sectional study in a causal inference (the conclusion that the factors cause the outcome variable) at some level. Additionally, the retrospective nature of the data may suffer from recall bias.

Sampling

The study population is people who had disabilities when they were attending a higher education institution who have since graduated. A desirable sampling frame for this study would have included alumni from multiple universities who fit the criteria.

However, convenience sampling will be utilized due to the researcher's inability to obtain this information from any other universities. A convenience sampling was used by surveying alumni from a faith-based university located in Texas. The survey was sent to all alumni of this institution who graduated from 2006–2020. To be included in this study, adults must (1) have attended or graduated from this institution, and (2) have been served by the disability services office of this institution. The principal investigator was able to access the list of alumni through the directory information available to them as an intern at the disability services office.

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Instruments

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The instrument used in this study contained four major sections: successful transition (outcome variable), factors of a successful transition (institutional support, individual external support, individual internal support), accommodations in the workplace, and demographic information.

Successful Transition

The outcome variable for this study, successful transition from higher education to the workforce, will be measured by a binary variable about whether the individual has obtained full-time gainful employment within one year of graduation from a higher education institution (e.g., "after graduation, how long was it until you were employed in a full-time position?"). The researcher developed this question to measure this construct. The options of the answers to this question include: 0-3 months, 4-8 months, 9-12 months, 1-2 years, 3-4 years, or unemployed. The variable "Successful Transition" is initially coded as 1 when they answered 0-3 months, 4-8 months, or 9-12 months. Otherwise, it is coded as 0. Due to there being no significant factors during the initial

analysis, another outcome variable was created by using this variable. The new variable, defined as "time it took to gain full-time employment," is coded as follows: 1: 0-3 months, 2: 4-8 months, 3: 9-12 months, 4: 1-2 years, 5: 3-4 years, and 6: unemployed.

Factors of a Successful Transition

To measure the factors of a successful transition holistically and comprehensively for adults with disabilities, this study utilized a combination of three existing scales: the College Students with Disabilities Campus Climate Survey (CSDCCS) that was developed by Lombardi, Gerdes, and Murray (2011), the General Self-Efficacy Scale (GSE) that was developed by Schwarzer and Jerusalem (1995), and the Self-Determination Scale (SDS) that was developed by Sheldon and Deci (1993). These original scales measure the current status of the respondent and their campus environment. To fit the needs of the research, which attempts to measure the past status when the respondent was a student, the researcher modified the original questionnaires by changing the present tense to the past tense.

Most of the factors were measured by using six sub-scales from the CSDCCS (utilizing accommodations, disability services, campus climate, peer support, familial support, and self-advocacy). The original survey includes 40 total items under eight sub-scales, with each item measured on a scale of 1 ("never true") to 6 ("always true"). The overall reliability of the CSDCC survey ($\alpha = .80$) is higher than adequate (Nunnally, 1975) and the reliability of the sub-scales ranged from .99 on Peer Support to .72 on Utilizing Accommodations. The mean score of each sub-scale was calculated. A higher score indicates a higher level in each construct. Information about the remaining two

scales is presented under each prospective section: the GSE (self-efficacy section), and the SDS (self-determination section).

Institutional Support

Institutional support was measured by three sub-scales of the CSDCCS (Utilization of Accommodations, Disability Services, and Campus Climate).

Utilization of Accommodations. Utilization of Accommodations sub-scale of the CSDCCS (α =.72) was used. This sub-scale has five items pertaining to students' use of the accommodations they qualify for, including specific conditions (e.g., "I didn't utilize my accommodations unless I was not doing well in a class") and adherence to accommodation-specific procedures outlined by the Disability Services office (e.g., "I requested faculty notification letters from Disability Services"). To score these items accurately, items 1 and 2 needed to be reverse scored so that the higher score indicates a more positive utilization of accommodations.

Disability Services. Disability Services were measured by the Disability Services sub-scale ($\alpha = .77$), contains four items relating to student comfort and satisfaction with the Disability Services staff and procedures (e.g., "I felt comfortable discussing challenges related to my disability with people who worked in Disability Services").

Campus Climate. The Campus Climate sub-scale ($\alpha = .79$) was used to measure disability-related stigma that is present on the college campus. This construct contains nine items relating to broad environmental factors (e.g., "I did not feel comfortable on this campus") and faculty's attempts to minimize barriers (e.g., "I felt as if my instructors doubted my ability to succeed when accommodations were provided"). To accurately

score these items, items 1, 2, 6, 7, 8, and 9 needed to be reverse scored so that a higher score indicates a more positive campus climate.

Individual External Support

Individual-external support was measured by two sub-scales of the CSDCCS (Peer Support and Familial Support).

Peer Support. Peer Support was measured by the Peer Support sub-scale ($\alpha =$ .88). This sub-scale has four items relating to student perceptions of their peers (e.g., "I have trouble making friends at this university" and "I make friends easily at this university"). To score this sub-section correctly, items 1, and 2 needed to be reverse scored so that a higher score indicates higher levels of peer support.

Familial Support. Another aspect of individual external support is Family Support. This construct was measured by the Family Support sub-scale of CSDCCS ($\alpha =$ .79). This sub-scale includes four items relating to student perceptions of support offered by family members such as "my family members helped me in college by providing me emotional support."

Individual Internal Support

Individual-internal support was measured by one sub-scale of the CSDCCS (self-advocacy), as well as two sub-scales created by the principal investigator in coordination with the literature (self-determination and self-efficacy).

Self-Advocacy. Self-Advocacy was measured using the Self-Advocacy sub-scale of CSDCCS ($\alpha =$ .80). This sub-scale contains six items pertaining to students' beliefs that they can accomplish certain academic tasks (e.g., "I keep up with the reading in most of my courses"), comfort level with approaching faculty to describe their individual

needs (e.g., "I feel comfortable advocating for myself and my needs at this university"), and knowledge of their rights (e.g., "I know about my rights and responsibilities as a student with a disability").

Self-Determination. Self-Determination was measured using the Self-Determination Scale (SDS) that was developed by Sheldon and Deci (1993). The scale contains ten items under two sub-scales: five items for the self-contact construct (e.g., (A) "my body sometimes felt like a stranger to me" versus (B) "my body always felt like me") and five items for the choicefulness construct (e.g., (A) "I chose to do what I had to do" versus (B) "I did what I had to do, but I didn't feel like it was really my choice"). For each of the ten items in this survey, the subjects were asked to determine which of two statements feels truer using a scale ranging from 1 ("only A feels true") to 5 ("only B feels true"). The overall reliability of the SDS ranges in Cronbach's alphas between .86 and .92 in several samples. A summed score is used to measure each sub-scale separately (range from 5 to 25) or the overall SDS score (range from 10 to 50). For the purpose of this research, the overall SDS score was used. To calculate the score, items 1, 3, 5, 7, and 9 needed to be reverse scored so that a higher score indicates a higher level of self-determination.

Self-Efficacy. Self-Efficacy was measured using the General Self-Efficacy Scale (GSE) that was developed by Schwarzer and Jerusalem (1995). This scale contains 10 items pertaining to the student' ability to handle conflict (e.g., "when I was confronted with a problem, I could usually find several solutions") and the student's ability to stick to plans (e.g., "it was easy for me to stick to my aims and accomplish my goals"). Each item is measured on a scale of 1 ("not at all true") to 4 ("exactly true"). The reliability of

this unidimensional scale ranges from .76 to .90 in samples from 23 countries. The values of all the items were summed up to calculate a total score (range between 10 and 40). A higher score indicates that the respondent has higher levels of self-efficacy.

Accommodations in the Workplace

In addition to successful transition, this study attempts to answer another research question about accommodation in the workplace. This construct will be measured by five items related to feeling valued in the workplace (e.g., "I feel valued in my workplace") and current knowledge of rights (e.g., "I know my rights under the ADA"). These items were developed by the principal investigator to measure use of accommodations in the workplace as a tangent to a successful transition. Therefore, there is no evidence for the validity of the reliability of this measure.

Demographic Information

Finally, demographic information was collected. Information included gender, age, and race.

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Ethical Considerations

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As with any research study, there are many ethical considerations of which to be aware. These include but are not limited to the presence of special populations, the protection of privacy and confidentiality, the researcher's clinical responsibility to prioritize safety, study-related Family Educational Rights and Privacy Act (FERPA) considerations, compensation, and the Institutional Review Board (IRB) application.

Special Populations

There are multiple ethical considerations that a researcher must make when working with special populations. Special consideration is needed if the survey

participant is a student. This study excluded students from participating by including a question in the survey clarifying if they are currently a student. If the answer is yes, they were directed to exit the survey.

Privacy and Confidentiality

Privacy and confidentiality were maintained and assured by obtaining subjects' informed consent to participate in the research before data collection occurs. All participants were informed that they have the right to decline to participate in the study, as well as to withdraw at any time without penalty.

No identifying information was recorded to protect the respondents' right to confidentiality. The information is stored on a password-protected computer. Upon completing the surveys, the researcher shredded and deleted the list of survey participants to maintain confidentiality. The collected data will be destroyed after the research has been completed.

Clinical Responsibility to Prioritize Safety

The survey does not include any sections that should cause any damage to the sample population. Since the researcher is a mandated reporter, any mention of suicidal thoughts was reported. To address the issue with complete precaution, the informed consent form included a statement informing the respondents of the researcher's duty as a mandated reporter.

FERPA Considerations

Due to the use of internal database records, the FERPA form was completed as a part of the IRB approval application. The only information that the researcher needed were email addresses from the directory to initially contact the potential participants of

the survey. The participants were asked to self-disclose their disability, but there were minimal risks of violating rules or regulations as outlined by the Health Insurance Portability and Accountability Act of 1996 (HIPAA) or FERPA.

Compensation

All participants were entered into a drawing in which the winner was awarded a $25 Visa gift card. Participants were informed that their participation is voluntary and anonymous, as the only identifying information collected was the option to enter their preferred contact information of a phone number or email address at the end of the survey.

IRB Application

The principal investigator applied to the Institutional Review Board of Abilene Christian University for the approval of study as exempt status given that data for the study were collected through survey procedures, which were sent to the sample through contact information found in the existing programmatic directory. As a part of the IRB application process, the principal investigator completed the HIPAA/FERPA form.

Data Collection

After the researcher obtained the approval from the IRB (see Appendix), an online survey was used to collect data through the existing disability services office directory. Because the researcher was an intern in the office, the researcher had access to the list of email addresses of the potential participants who met the criteria of this study. The researcher sent an email with a link and an invitation to complete the survey, created using Google Forms, from their provided school email to the potential participants. The

collected data were stored in an Excel spreadsheet on a password-protected computer and then transferred to a statistical analysis system to analyze the data.

Data Analysis

Data were analyzed using SPSS-PC (version 25.0 for Windows; SPSS, Chicago, IL, USA). Descriptive analyses were performed to describe the characteristics of the sample and the distribution of major variables. A hierarchical logistical regression analysis was conducted to explore the impact that each factor has on the outcome variable, a successful transition from higher education to the workforce. The hierarchical logistic regression yielded no significant results; therefore, a linear regression was run to determine which factors have a higher correlation with a shorter amount of time spent in finding full-time employment. Hypothesis testing was conducted using the alpha level of 0.05.

The present study includes some measurement scales: CSDCCS including multiple sub-scales of the CSDCCS (Utilization of accommodation, Disability services, and Campus climate), Self-Determination Scale, and General Self-Efficacy Scale. The original developers suggest calculating either sum score or mean score, which results in creating a composite variable. According to Song et al. (2013), a composite variable is "made up of more than three indicators that are highly related to one another and include scales, single or global ratings, or categorical variables" (p. 46). They also claim that using composite variables is a common practice for certain purposes, such as "addressing multicollinearity for regression analysis or organizing multiple highly correlated variables into more digestible or meaningful information" (Song et al., 2013, p. 46). The

answers to related questionnaires were categorized into a composite variable by taking the mean of the scores of them.

Preliminarily, a series of reliability analyses were performed to check the goodness of the scales by checking the internal consistency of each scale. The internal consistency indicates the extent to which all the items or indicators measure the same construct and the inter-relatedness of the items with each other (Tavakol & Dennick, 2011).

Cronbach's alpha is a widely used tool for assessing the internal consistency of a scale. This value refers to "the extent that correlations among items in a domain vary" (Nunnally, 1978, p. 206). However, there is some error connected with the average correlation found in any particular sampling of items" (Nunnally, 1978, p. 206). Nunnally argued that an alpha level of equal to or higher than .70 should be considered to be indicative of minimally adequate internal consistency. Although there are different reports about the acceptable values, this value is widely used for a cut-off value. The following section, Chapter IV: Findings, provides information including what indicators were included in each scale and its Cronbach's alpha.

CHAPTER IV

FINDINGS

Participants

Table 1 (see page 40) presents descriptive statistics informing the participants'

demographic background. The study participants in this sample were mostly female

(56.0%) The largest age group consisted of adults aged 20-25, accounting for 44.0 %.

The participants were aged between 20 and 35 years old ($M = 26.78$ years, $SD = 15$). The

mean level indicating the participant's knowledge that they had a disability as defined by

the ADA was low ($n = 14$, indicating 56.0%). The mean level of disclosure of ADA

disability in the workplace was found to be low ($n = 8$, indicating 32.0%). Employment

after college shows that 60.0% of participants were employed full-time within three

months of graduating from a college institution.

Table 1

*Characteristics of the Sample (*N* = 25)*

Variable	Category or Range	*n* or *M*	*%* or *SD*
Gender	Female	14	56.0
	Male	11	44.0
Race	Caucasian	24	96.0
	Multiple	1	4.0
Age	20-25	11	44.0
	26-30	8	32.0
	31-35	6	24.0
ADA Disability	I don't know	7	28.0
	No	4	16.0
	Yes	14	56.0
Employment after College	Unemployed	2	8.0
	0-3 months	15	60.0
	4-8 months	6	24.0
	1-2 years	2	8.0

Descriptive Statistics of Major Variables

The following section describes the qualitative data from the results of each sub-section of the survey sent to the study sample.

Accommodation

Table 2 presents the data for the original items, along with the reliability test results and the calculated composite value based on the reliability test results. The sub-scale used for this factor, Utilizing Accommodations sub-scale of the CSDCCS, includes three reversed items that are worded in an opposite direction from the rest of the items. These items were reverse coded so that a high value indicates the same type of response on every item. A reliability test for the five items, which includes reverse coded items, yielded the Cronbach's alpha .683, which is smaller than a widely used cut-off point of

.7. The item "Accomodataion5" was eliminated because this elimination increased the internal consistency reliability. After the elimination, the factor "Accommodation" exhibited an acceptable internal consistency (Cronbach's α = .787). Therefore, the scores on the four items were averaged to generate a composite value to measure Accommodation Mean. The distribution of this composite variable has a mean of 3.60 with a standard deviation of 1.34.

Table 2

*Accommodation: Descriptive and Internal Consistency (*N = 25*)*

	N	Min	Max	M	SD
AccommodationMean (Cronbach's α=.787)	25	1.00	5.75	3.60	1.34
1. Accommodation1R	25	2.00	6.00	4.28	1.59
2. Accommodation2R	25	1.00	6.00	3.68	1.65
3. Accommodation3	25	1.00	6.00	4.12	1.69
4. Accommodation4	25	1.00	6.00	4.24	1.92
5. Accommodation5R	25	1.00	6.00	2.12	1.27

Note. This is the Cronbach's α after reverse coding and eliminating the fifth item.

Disability Services

Table 3 (see page 42) presents the data for the results from the Disability Services sub-scale of the CSDCCS. Table 3 represents original items, along with the reliability test results and the calculated composite value based on the reliability test results. A reliability test for the four items yielded the Cronbach's alpha .627, which is smaller than a widely used cut-off point of .7. No meaningful improvement can be made by deleting any items. Therefore, the scores on the four items were averaged to generate a composite value to measure Disability Services Mean. The distribution of this composite variable has a mean of 5.14 with a standard deviation of 0.92162.

Table 3

*Disability Services: Descriptive and Internal Consistency (*N *= 25)*

	N	Min	Max	*M*	*SD*
DisabilityServicesMean (Cronbach's α=.627) [a]	*25*	2.75	6.00	5.14	0.92
1. DisabillityServices1	25	3.00	6.00	5.28	1.10
2. DisabillityServices2	25	1.00	6.00	5.36	1.29
3. DisabillityServices3	25	2.00	6.00	5.68	0.85
4. DisabillityServices4	25	1.00	6.00	4.24	1.90

Note. This is the Cronbach's α after calculating all 4 items.

Campus Climate

Table 4 (see page 43) presents the data for the original items, along with the reliability test results and the calculated composite value based on the reliability test results. The Campus Climate sub-scale of the CSDCCS includes six reversed items that are worded in an opposite direction from the rest items. These items were reverse coded so that a high value indicates the same type of response on every item. A reliability test for the nine items, which includes reverse coded items, yielded the Cronbach's alpha .726, which is larger than a widely used cut-off point of .7. Therefore, the scores on the nine items were averaged to generate a composite value to measure Campus Climate Mean. The distribution of this composite variable has a mean of 4.8311 with a standard deviation of 0.73501.

Table 4

Campus Climate: Descriptive and Internal Consistency (N = 25)

	N	Min	Max	M	SD
CampusClimateMean (Cronbach's α=.726)	25	2.33	5.67	4.83	0.74
1. CampusClimate1R	25	1.00	5.00	2.00	1.19
2. CampusClimate2R	25	1.00	6.00	1.68	1.22
3. CampusClimate3	25	2.00	6.00	4.64	1.25
4. CampusClimate4	25	2.00	6.00	5.32	0.90
5. CampusClimate5	25	2.00	6.00	4.64	1.44
6. CampusClimate6R	25	1.00	6.00	2.80	1.73
7. CampusClimate7R	25	1.00	6.00	1.52	1.16
8. CampusClimate8R	25	1.00	5.00	1.48	1.00
9. CampusClimate9R	25	1.00	6.00	3.64	1.68

Note. This is the Cronbach's α after calculating all 9 items.

Peer Support

Table 5 (see page 44) presents the data for the original items, along with the reliability test results and the calculated composite value based on the reliability test results. The Peer Support sub-scale of the CSDCCS includes two reversed items that are worded in an opposite direction from the rest items. These items were reverse coded so that a high value indicates the same type of response on every item. A reliability test for the four items, which includes reverse coded items, yielded the Cronbach's alpha .850, which is larger than a widely used cut-off point of .7. Therefore, the scores on the four items were averaged to generate a composite value to measure Peer Support Mean. The distribution of this composite variable has a mean of 3.61 with a standard deviation of 0.47915.

Table 5

*Peer Support: Descriptive and Internal Consistency (*N = 25*)*

	N	Min	Max	M	SD
PeerSupportMean (Cronbach's α=.850)	25	3.00	5.00	3.61	0.48
1. PeerSupport1R	25	1.00	6.00	1.92	1.44
2. PeerSupport2R	25	1.00	4.00	1.48	0.92
3. PeerSupport3	25	2.00	6.00	5.52	0.92
4. PeerSupport4	25	2.00	6.00	5.52	1.05

Note. This is the Cronbach's α after calculating all 4 items.

Family Support

Table 6 presents the results from the Family Support sub-scale of the CSDCCS, including data for the original items along with the reliability test results and the calculated composite value based on the reliability test results. A reliability test for the four items yielded the Cronbach's alpha .795, which is larger than a widely used cut-off point of .7. Therefore, the scores on the four items were averaged to generate a composite value to measure Family Support Mean. The distribution of this composite variable has a mean of 4.98 with a standard deviation of 1.05801.

Table 6

*Family Support: Descriptive and Internal Consistency (*N = 25*)*

	N	Min	Max	M	SD
FamilySupportMean (Cronbach's α=.795)	25	2.25	6.00	4.98	1.06
1. FamilialSupport1	25	2.00	6.00	5.08	1.12
2. FamilialSupport2	25	2.00	6.00	4.64	1.32
3. FamilialSupport3	25	2.00	6.00	5.00	1.32
4. FamilialSupport4	25	1.00	6.00	5.20	1.58

Note. This is the Cronbach's α after calculating all 4 items.

Self-Determination

Table 7 presents the data for the original items, along with the reliability test

results and the calculated composite value based on the reliability test results. The Self-

Determination Scale (SDS) includes five reversed items that are worded in an opposite

direction from the rest items. These items were reverse coded so that a high value

indicates the same type of response on every item. A reliability test for the ten items,

which includes reverse coded items, yielded the Cronbach's alpha .781, which is larger

than a widely used cut-off point of .7. Therefore, the scores on the ten items were

averaged to generate a composite value to measure Self Determination Mean. The

distribution of this composite variable has a mean of 4.58 with a standard deviation of

0.62249.

Table 7

*Self-Determination: Descriptive and Internal Consistency (*N = 25*)*

	N	Min	Max	*M*	*SD*
SelfDeterminationMean (Cronbach's α=.781)	25	3.10	5.50	4.58	0.62
1. SelfDetermination1R	25	2.00	5.00	3.20	0.96
2. SelfDetermination2	25	1.00	5.00	3.52	1.16
3. SelfDetermination3R	25	2.00	5.00	3.00	0.96
4. SelfDetermination4	25	2.00	5.00	4.12	0.93
5. SelfDetermination5R	25	1.00	5.00	3.84	1.31
6. SelfDetermination6	25	1.00	5.00	3.84	1.40
7. SelfDetermination7R	25	2.00	5.00	3.32	0.80
8. SelfDetermination8	25	2.00	5.00	4.56	0.77
9. SelfDetermination9R	25	2.00	5.00	3.36	0.81
10. SelfDetermination10	25	1.00	5.00	4.04	1.37

Note. This is the Cronbach's α after calculating all 10 items.

Self-Advocacy

Table 8 presents the results from the Self-Advocacy sub-scale of the CSDCCS, including data for the original items, along with the reliability test results and the calculated composite value based on the reliability test results. A reliability test for the six items yielded the Cronbach's alpha .825, which is larger than a widely used cut-off point of .7. Therefore, the scores on the six items were averaged to generate a composite value to measure Self-Advocacy Mean. The distribution of this composite variable has a mean of 4.7333 with a standard deviation of 0.94158.

Table 8

Self-Advocacy: Descriptive and Internal Consistency (N=25)

	N	Min	Max	M	SD
SelfAdvocacyMean (Cronbach's α=.825)	25	2.33	5.83	4.73	0.94
1. SelfAdvocacy1	25	2.00	6.00	4.72	1.31
2. SelfAdvocacy2	25	2.00	6.00	4.92	1.12
3. SelfAdvocacy3	25	2.00	6.00	4.28	1.51
4. SelfAdvocacy4	25	1.00	6.00	4.48	1.56
5. SelfAdvocacy5	25	2.00	6.00	4.76	1.16
6. SelfAdvocacy6	25	3.00	6.00	5.24	0.97

Note. This is the Cronbach's α after calculating all 6 items.

Self-Efficacy

Table 9 (see page 47) presents the results from the General Self-Efficacy Scale (GSE), including data for the original items, along with the reliability test results and the calculated composite value based on the reliability test results. A reliability test for the ten items yielded the Cronbach's alpha .893, which is larger than a widely used cut-off point of .7. Therefore, the scores on the ten items were averaged to generate a composite value to measure Self-Efficacy Mean. The distribution of this composite variable has a mean of 3.36 with a standard deviation of 0.52335.

Table 9

*Self-Efficacy: Descriptive and Internal Consistency (*N* = 25)*

	N	Min	Max	*M*	*SD*
SelfEfficacyMean (Cronbach's α=.893)	25	2.10	3.90	3.36	0.52
1. SelfEfficacy1	25	2.00	4.00	3.36	0.70
2. SelfEfficacy2	25	2.00	4.00	3.04	0.73
3. SelfEfficacy3	25	1.00	4.00	3.20	0.76
4. SelfEfficacy4	25	2.00	4.00	3.40	0.65
5. SelfEfficacy5	25	2.00	4.00	3.32	0.69
6. SelfEfficacy6	25	2.00	4.00	3.48	0.71
7. SelfEfficacy7	25	1.00	4.00	3.24	0.78
8. SelfEfficacy8	25	1.00	4.00	3.16	0.80
9. SelfEfficacy9	25	1.00	4.00	3.24	0.72
10. SelfEfficacy10	25	1.00	4.00	3.40	0.76

Note. This is the Cronbach's α after calculating all 10 items.

Accommodations in the Workplace

The present study aimed to examine the level of institutional support in the current workplace. The following two sections describe these levels of support.

Characteristics of the Sample in the Workplace

Table 10 (see page 48) presents descriptive statistics informing the participants' demographic background. Most of the study participants in this sample did not disclose their ADA diagnosed disability to their employer (68.0%). Five individuals (20.0%) disclosed this disability during the interview process, and only three individuals (12.0%) requested accommodations in the workplace.

Table 10

*Workplace Characteristics of the Sample (*N *= 25)*

Variable	Category or Range	*n* or *M*	% or *SD*
Workplace ADA Disclosure	No	17	68.0
	Yes	8	32.0
Time of ADA Disclosure	No answer	16	64.0
	In the interview	5	20.0
	After Hiring	1	4.0
	When I had difficulties and needed help	3	12.0
Request Accommodations	No	22	88.0
	Yes	3	12.0

Workplace Accommodations

Table 11 presents the data from the construct developed by the principal

investigator to measure use of accommodations in the workplace as a tangent to a

successful transition. Therefore, there is no evidence for the validity of the reliability of

this measure.

Table 11

*Workplace: Descriptive Consistency (*N *= 25)*

	N	Min	Max	*M*	*SD*
1. Workplace1	25	1.00	6.00	4.32	0.32
2. Workplace2	25	4.00	6.00	5.24	0.26
3. Workplace3	25	1.00	6.00	3.84	0.26
4. Workplace4	25	1.00	6.00	3.68	0.18
5. Workplace5	25	1.00	6.00	5.04	0.96

Hypothesis Testing

A binary linear regression analysis was performed to test the following

hypotheses:

- Hypothesis 1-1: Individuals who report higher levels of use of accommodations will be more likely to transition to the workforce successfully.

- Hypothesis 1-2: Individuals who report higher levels of interaction with disability services will be more likely to transition to the workforce successfully.

- Hypothesis 1-3: Individuals who experience more positive campus climates will be more likely to transition to the workforce successfully.

- Hypothesis 2-1: Individuals with higher levels of peer support will be more likely to transition to the workforce successfully.

- Hypothesis 2-2: Individuals with higher levels of familial support will be more likely to transition to the workforce successfully.

- Hypothesis 3-1: Individuals with higher levels of self-determination will be more likely to transition to the workforce successfully.

- Hypothesis 3-2: Individuals with higher levels of self-advocacy will be more likely to transition to the workforce successfully.

- Hypothesis 3-3: Individuals with higher levels of self-efficacy will be more likely to transition to the workforce successfully.

Because only two respondents (8%) in this sample were not employed, a binary logistic regression analysis that differentiate these two values (0 = unemployed and 1 = employed) did not provide useful information (all Wald statistics were almost zero). Therefore, a linear regression analysis was conducted by replacing the binary outcome variable with a continuous variable (employment after college: a higher value indicates that it took a longer time for employment). Multicollinearity in a multiple regression model was assessed first because this statistic assumes non-multicollinearity indicating

that bivariate correlations between predictors with each other should not be high to be concerned. The cut-off value for identifying a factor of concern is detected using the tolerance value with smaller than 0.2. One factor under the cut-off value, Self-Advocacy with a value of 0.152, was eliminated. After the removal, there is less concern about multicollinearity in the revised model. Considering the small sample size and several predictors, both bootstrap and linear regression approaches were implemented. Since both regression models revealed the same results (two significant factors for the outcome variable), the results of a regression analysis without bootstrap are presented in Table 12.

Table 12 shows the hierarchical linear regression analysis by adding predictors in each model: institutional support factors in Model 1, individual-external factors in Model 2, and individual-internal factors in Model 3. As one can see in the table, the effect of each predictor changes when a different set of predictors were included. Model 1 and Model 2 did not include any statistically significant factors. Once the individual-internal factors were included in the model (Model 3), two predictors were found to be significant. The strongest predictor was Campus Climate ($t = -2.507$, $p = .023$). The negative association indicates that students who experienced a more positive campus climate spent less time in finding full-time employment. The second strongest predictor was the Utilization of Accommodation ($t = -2.251$, $p = .038$). The negative association indicates that students who more regularly utilized the accommodations that were available to them in a higher educational institution spent less time in finding full-time employment. Institutional factors explained the employment time the most (24.5%) based on the R square change after adding a group of predictors. The other predictors were not statistically significant.

Table 12

*Hierarchical Linear Regression Analysis of Time Lapsed in Gaining Employment (*N = 25)*

Category		Model 1		Model 2		Model 3	
		b	t	B	t	b	t
Institutional	Disability Services	0.214	1.074	0.178	0.856	0.392	1.797
	Accommodation	-0.236	-1.917	-0.211	-1.617	-0.287	2.251*
	Campus Climate	-0.445	-2.019	-0.457	-1.967	-0.641	-2.507*
Individual-External	Peer Support			0.312	0.966	0.094	0.280
	Family Support			0.09	0.62	0.144	0.907
Individual-Internal	Self-Determination					0.512	1.707
	Self-Efficacy					-0.773	-2.101
	F		2.272		1.563		2.050
	R square		0.245		0.292		0.458
	R square change		0.245		0.046		0.166

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

CHAPTER V

DISCUSSION

The present study aimed to discover specific factors that had an association with a

successful transition from higher education to the workforce in adults with disabilities.

This is a social and educational problem due to the dropout rates in higher education of

adults with disabilities, as well as the disparities they face in the workplace

(underemployment and pay gaps). This problem can be defined as social due to the role

that factors such as campus climate play in the success of students at institutions of

higher education. There have been multiple studies related to success among people with

disabilities in workplaces, colleges, or the transition from higher education to the

workforce. However, few studies have thoroughly and holistically investigated the effect

of multiple factors on the successful transition from higher educational institutes to the

workforce specifically for adults with disabilities.

Discussion of Major Findings

The present study yielded the results that all factors analyzed had an association

with the outcome of a successful transition from higher education to the workplace in

adults with disabilities. However, only two of the factors had significant associations.

These two factors with significant associations include campus climate and the utilization

of accommodations. These results were surprising, as the primary researcher expected

that individual-internal factors (self-efficacy, self-determination, and self-advocacy)

would have a higher association with the outcome due to the social work lens and

predisposition that individuals are able to persevere through external and environmental difficulties so long as they possess the internal factors of self-efficacy, self-determination, and self-advocacy to rely on. The present study tested three hypotheses with eight sub-hypotheses. Of the eight sub-hypotheses tested, only two sub-hypotheses were supported by the results of the present study.

Discussion of Hypothesis Test Findings

The first hypothesis tested environmental factors. The first sub-hypothesis, individuals who report higher levels of use of accommodations will be more likely to transition to the workforce successfully, is supported by the results of the present study as the association between utilization of accommodations and a successful transition to the workforce was significant with the lowest result of -2.251. The second sub-hypothesis, individuals who with higher levels of interaction with disability services will be more likely to transition to the workforce successfully, is not supported due to the lack of a significant association with the outcome. The third sub-hypothesis, individuals who experience more positive campus climates will be more likely to transition to the workforce successfully, is supported by the results of the present study as the association between campus climate and a successful transition to the workforce was significant with the second lowest result of -2.507.

The second hypothesis tested individual-external factors. The first sub-hypothesis, individuals with higher levels of peer support will be more likely to transition to the workforce successfully, is not supported due to the lack of a significant association with the outcome. The second sub-hypothesis, individuals with higher levels of familial

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support will be more likely to transition to the workforce successfully, is not supported due to the lack of a significant association with the outcome.

The third hypothesis tested individual-internal factors. The first sub-hypothesis, individuals with higher levels of self-determination will be more likely to transition to the workforce successfully, is not supported due to the lack of a significant association with the outcome. The second sub-hypothesis, individuals with higher levels of self-advocacy will be more likely to transition to the workforce successfully, is not supported due to the lack of a significant association with the outcome. The third sub-hypothesis, individuals with higher levels of self-efficacy will be more likely to transition to the workforce successfully, is not supported due to the lack of a significant association with the outcome.

The two sub-hypotheses that were supported, utilization of accommodations and campus climate, are congruent with evidence provided in the literature review. The support of the hypothesis that a more positive campus climate in higher institutions is associated with a more successful transition to the workforce is congruent with the literature that states that students who take advantage of campus organizations are more likely to succeed, experience higher academic success, and have higher self-esteem (Cosden & McNamara, 1997; DeLee, 2015; Lombardi et al., 2016; Thomas, 2000). The support of this hypothesis is also congruent with the experience of the primary researcher, including the primary researcher's role as the "Accommodations and Testing Specialist" for the Disability Services Department at a private university in Texas. During the primary researcher's time in this role, many students discussed their wish to have groups

where they were felt like they belonged, speaking to the need and desire for a more positive campus climate.

The support of the hypothesis that utilization of accommodations in higher education can be associated to a more successful transition to the workforce is congruent with evidence presented in the literature review such as the mandate by the ADA that states "goods, services, facilities, privileges, advantages, and accommodations will be afforded to an individual with a disability in the most integrated setting appropriate to the needs of the individual" (ADA, 1990; Enright et al., 1996). The support of this hypothesis is also congruent with the statement that by integrating services and providing them in the least intrusive manner possible, the student's attention can be placed on their academic success rather than their disability and accommodations (Conyers, 1996; Enright et al., 1996; Szymanski, 1994). The support of this hypothesis is congruent with the primary researcher's experience in higher education, as there were many students who contacted the primary researcher regarding their need for accommodations or with questions related to utilizing their approved accommodations. Many students expressed their thankfulness that they had access to accommodations, as they understood the weight and significance that utilizing accommodations would have on their overall success.

While these two sub-hypotheses were supported by the results of the present study, it is probable that different results may be acquired through future studies that do not include the limitations included in the present study. It is also likely that there may be confounding variables present that were not addressed in the present study that would have a higher association with the successful transition from higher education to the workforce.

Since six sub-hypotheses were not supported through the results of the present study, the results were found incongruent with evidence provided in the literature review. All factors analyzed in the present study influenced the outcome of a successful transition to the workforce, although these factors did not have a significant association with the outcome. While the present study did not support the hypothesis that disability services, individual-external factors (familial support and peer support), and individual-internal factors (self-efficacy, self-determination, and self-advocacy) had a significant relationship to a successful transition to the workplace, the evidence presented in the literature review suggest that each of these factors are associated at some level to a successful transition from higher education to the workforce. Due to the differences in evidence from the literature review and findings from the present study, it is likely that the present study failed to find accurate significant associations due to limitations in the study (e.g., sample size, recall bias, selection bias).

Discussion of Current Workplace Findings

A second aim of the present study aimed to determine how adults with disabilities felt in their current workplace. The results of the present study led the principal investigator to interpret that the majority of adults with disabilities do not choose to disclose their disability to their employer or to request accommodations in their workplaces. Despite these results, most of the sample felt comfortable discussing their disability with others, felt valued in the workplace, knew their rights under the ADA, could state the accommodations that they are guaranteed by law, and felt that their current employer met their needs in order to help them to be a successful employee.

Limitations of this Study

Several limitations to this research study should be noted. First, it is important to address that time difference in the data may address limitations of a cross-sectional study in a causal inference (the conclusion that the factors cause the outcome variable) at some level due to the recall bias, though patterns of association may be observed. Second, the generalizability is limited because this study includes selection bias as the informed consent and survey are being sent to school-based emails that may not be in use currently by the potential participants. The measurements require the participants to recall information from their time spent in a higher education institution which could cause inconsistencies in the data. Historical bias is also applicable as the use of accommodations and the university's policies have changed over the years. Moreover, it must be pointed out that the low study response rate of 0.04% with a sample of 25 participants is undesirable. A convenience sampling was used, and the primary investigator was unable to gather data from multiple institutions.

Implications of Findings

The present study found that of all the factors studied and analyzed (environmental factors, individual-external factors, and individual-internal factors), environmental factors had the highest association with the outcome of a successful transition from higher education to the workplace in adults with disabilities. The results of the present study have multiple implications for practice, policy, and future research.

Implications for Practice

The results of the present study suggest that there are multiple implications for practice in both higher education for individuals with disabilities and for administrators and professors, as well as in the workplace.

Implications for Higher Education

The present study found the strongest predictors of a successful transition from higher education to the workforce. This result implies that campus climate needs to be improved and more positive on college campuses. Social work personnel should develop holistic trainings for professors and administrators regarding how disabilities affect their students. These trainings should include explanations of disabilities that are prevalent and how they affect individuals' ability to effectively work. These holistic trainings should also include detailed explanations of common accommodations that are used by students on college campuses and how they can be used to build success for students. By participating in these holistic trainings, professors and administrators are more likely to be accommodating and understanding of their students, therefore creating a more positive campus climate. A second implication for practice to improve campus climate in higher education institutions can include support groups for students with disabilities to aid in their knowledge that they are not alone, as well as their feelings of acceptance on their college campus to improve their outlook on the overall campus climate.

While the current study found that campus climate is the factor that most highly affects a successful transition to the workplace, the other factors included in this study also need to be addressed. The second strongest predictor for a successful transition from higher education to the workforce was the utilization of accommodations throughout

higher education. Based on specific questions used in the current study, it should be noted that many students 1) do not know about the accommodations that are available to them, and 2) do not feel comfortable asking to use accommodations due to social stigma from both peers and professors. These findings imply that social work administrators need to ensure that all higher education institutions 1) have a disability services department that is available to students, 2) ensure that students who disclose disabilities during admission to the institution are connected to the disability services department, 3) have a comprehensive intake process for students with disabilities to ensure that they receive the accommodations that will aid the students in having a successful academic career, and 4) have professors who are understanding of students' needs and the accommodations that they need to use. If these four items are in place, there is a higher probability that students will use the accommodations that are available to them, which can be associated with a higher success rate in higher education institutions, resulting in a more successful transition to the workforce.

Implications for the Workplace

The present study found that most individuals with disabilities do not disclose these disabilities to their prospective or current employers. Those who do disclose disabilities are not likely to request accommodations. This could influence their ability to successfully complete the tasks associated with their jobs. In order to lower the rates of underemployment for adults with disabilities discovered in the literature review, employers and institutions should increase the availability of accommodations, as well as implement more accessible components to ensure that adults with disabilities can still

succeed in the workplace even if they do not disclose their disability or request accommodations.

Implications for Policy

The findings of this study and the implications previously mentioned for practice should also expand to the national level, including trainings on disabilities and their effect on student's performances and experiences in higher education. If all higher education institutions had these trainings, and institutions of higher education had more positive campus climates, the dropout rates of adults with disabilities would decrease, leading to a more beneficial experience in higher education, which has direct links to a more successful transition to the workforce. When keeping in mind that no institution has the same population which implies that no campus climate will be completely transferrable to other institutions, all educational institutes should research the best methods for improving campus climate on their specific campus to provide policies that are specific to each campus's educational needs. The current study also implies that there should be policies in higher educational institutions that enforce students' abilities and rights to use their approved accommodations to ensure the highest success possible for each student. This should also include periodic monitoring and assessment of the accommodations that are being utilized as well as the faculty or staff that may continue to disregard the requirements to accommodate students. Social work personnel should also ensure that institutions of higher education have professionals trained in social work ethics, theories, and policies related to individualized needs. A specific theory that is useful in the present study is systems theory, which theorizes that behavior in individuals is likely influenced by a multitude of factors (e.g., relationships with family and friends, environmental

factors, and social settings). It is important to note that this theory relates to the findings of this study as the present study found that certain factors (campus climate and utilization of accommodations) had a higher association with a successful transition to the workplace.

Implications for Research

Despite limitations of this study attributed to the small sample size and lack of randomization, this pilot study found that campus climate is the factor that has the highest level of association with a successful transition from higher education to the workforce in adults with disabilities. Utilization of accommodations in institutions of higher education has the second highest level of association with a successful transition from higher education to the workforce. Further studies should include data from multiple institutions to gather more comprehensive and holistic data from a more inclusive study population than the current study, as the results of this study should be confirmed at a larger level. Further studies should also include data collected from students currently enrolled in a higher educational institution to gather current data to avoid data skewed by recall bias or historical bias. Future research may benefit from qualitative research to ensure comprehensive analysis of what factors affected a successful transition to the workforce as well as the rationale for why those factors have such an impact on the successful transition.

CHAPTER VI

CONCLUSIONS

The present study aimed to discover specific factors that had an association with a successful transition from higher education to the workforce in adults with disabilities. This is a social problem due to the dropout rates in higher education of adults with disabilities, as well as the disparities they face in the workplace (underemployment and pay gaps). The literature review found that factors that affect success in higher education institutes as well as a successful transition to the workforce include environmental factors (utilization of accommodations, campus climate, and disability services), individual-external factors (familial support and peer support), and individual-internal factors (self-efficacy, self-determination, and self-advocacy). The present study included a survey population of 25 students who have disabilities as defined by the ADA and were previously enrolled in a faith-based university located in Texas and utilized a cross-sectional retrospective design in the form of a survey.

The results of the present study show that while all factors analyzed had some association with a successful transition from higher education to the workplace, campus climate had the most significant association and utilization of accommodations had the second most significant association with the outcome. The results of the present study provide the implication that to improve success rates in adults with disabilities in higher education institutions as well as ensure a more successful transition to the workplace, institutions of higher education need to first focus on ensuring that there are policies and

practices in place to improve the positivity of the campus climate. Secondly, institutions of higher education need to ensure that they have a disability services department that provides the necessary accommodations to ensure that adults with disabilities are successful. Additionally, the present study found that the majority of individuals with disabilities either 1) do not disclose their disability in the workplace or 2) do not request accommodations in the workplace.

The results of the present study show that much research remains to be done relating to disabilities in higher education, disabilities in the workplace, and what factors help to create a successful transition from higher education to the workforce. This further research will aid social workers and institutes of higher education as an educational whole in improving the success rate of adults with disabilities both during their experience in higher education and in their transition to the workforce. Considering the limitations of this study listed earlier, the conclusion of this study should be interpreted with caution. Future research is needed to continue examining factors involved in the success of adults with disabilities in institutions of higher education as well as their successful transition to the workplace. Further research with more robust research methods that more effectively reduce bias is recommended to explore more about the associations that are inconsistent with previous literature review.

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APPENDIX

Institutional Review Board Approval Letter

ABILENE CHRISTIAN UNIVERSITY
Educating Students for Christian Service and Leadership Throughout the World

Office of Research and Sponsored Programs
320 Hardin Administration Building, ACU Box 29103, Abilene, Texas 79699-9103
325-674-2885

March 2, 2021

Tiffany Brown
Department of Social Work
ACU P.O. Box 29204
Abilene Christian University

Dear Tiffany,

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled
"Adults with Disabilities: What Factors Create a Successful Transition from Higher Education to the Workforce?",

(IRB# 21-022) is exempt from review under Federal Policy for the Protection of Human Subjects.

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable.

I wish you well with your work.

Sincerely,

Megan Roth

Megan Roth, Ph.D.
Director of Research and Sponsored Programs