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Disability Identity: An Investigation of The Relationship Between Stigma, Quality Of Life, and Psychological Distress

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DISABILITY IDENTITY: AN INVESTIGATION OF THE RELATIONSHIP BETWEEN STIGMA, QUALITY OF LIFE, AND PSYCHOLOGICAL DISTRESS

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ABSTRACT

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The purpose of this study was to investigate disability identity and the role that it may play in moderating the effect of disability-related stigma on both quality of life and psychological distress among persons with disabilities (PWDs). With respect to this purpose, it was hypothesized that disability identity would significantly moderate both the relationship between disability-related stigma and quality of life and the relationship between disability-related stigma and psychological distress. Further, this study aimed to investigate various aspects specific to one's life experience that may impact the presence or absence of disability identity. To this regard, it was hypothesized that aspects related to the experience of one’s disability including, the obviousness of one’s disability, the functional impact of one’s disability, and the onset of one’s disability each would be a significant predictor of one’s strength of disability identity.

Participants were recruited through convenience sampling from a regional Americans With Disabilities Act (ADA) Center for PWDs living in the Rocky Mountain region. In sum, a total of 873 adults with disabilities completed a brief demographics questionnaire in addition to measures of disability identity, disability related stigma, quality of life, and psychological distress. After survey completion, data were compiled and analyzed using a hierarchical multiple regression analysis.

The results of this study indicated that the presence of disability identity significantly moderated the negative impact of disability-related stigma on a PWD's quality of life. In other words, the presence of a positive disability identity was a protective factor leading to a higher quality of life among those impacted by disability-related stigma. However, the strength of one's disability identity did not have a significant moderation effect on the relationship between disability-related stigma and psychological distress.

Further, the results of this study also showed how a greater presence of disability identity was predicted by lower levels of functional impairment from one's disability, less obviousness of one's disability, and among those whose onset of disability was congenital rather than acquired later in life. Finally, other aspects of an individual's identity, including their gender, level of education, and current employment status, each significantly predicted the strength of disability identity, providing further context for future researchers to examine how certain intersectional aspects of one's identity impact their experience of disability.

It is anticipated that future researchers and mental health clinicians can use the results of this research to help expand their understanding and considerations of disability as an aspect of human diversity rather than as a deficit that may only cause difficulties in one's life. In doing so, mental health practitioners may be better able to determine how an individual identifies with their disability and how this may or may not contribute to their overall presenting mental health concerns. These results may also help clinicians be better able to applicably select and adapt clinical interventions tailored for affirmation of one's disability, promoting the development of a positive disability identity where appropriate. Overall, an increased understanding of the protective effect of disability identity should push clinicians to use more affirmative models of care and provide improved culturally informed services for PWDs.

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CHAPTER I

INTRODUCTION

Background

Disability is a component of human life that has not received adequate attention. The United States (U.S.) Centers for Disease Control and Prevention estimates that approximately one quarter of the adult U.S. population has a disability, and further that the percentage of disability occurrence increases as adults age (Okoro et al., 2018). Specifically, for adults over the age of 65, approximately 40% have a diagnosis of disability (Okoro et al., 2018). Expanding on this, the U.S. Census Bureau estimates that by 2030, the number of individuals in the U.S. over the age of 65 will outnumber the number of children for the first time in U.S. history (Taylor, 2018). Consequently, one can reasonably deduct that it is exceedingly likely that the incidence rate of disability will continue to increase. Despite this projected increase, the field of psychology is under-prepared to work with persons with disabilities (PWDs). Thus, it is of the utmost importance to enhance our understanding of disability at this time.

The profession of psychology has long reflected a value on individual diversity. Further, it has emphasized there to be a greater need for ethical practice with diverse populations through the American Psychological Association's *Standards of Accreditation for Health Service Psychology* (2019) and *Multicultural Guidelines: An Ecological Approach to Context, Identity, and Intersectionality* (2017). Although our profession has made great strides in increasing access and quality of mental health care for diverse groups of people on the whole, there is a notable lack of emphasis on people with disabilities (Olkin & Pledger, 2003). In many respects, the field of psychology has long categorized and relegated disability to the domain of rehabilitation psychology (Olkin & Pledger, 2003). Consequently, discussions of and scholarly work about PWDs have been limited in other disciplines, thus perpetuating the idea that psychologists as a whole do not need to be trained or possess skills to work with PWDs in their practice (Foley-Nicpon & Lee, 2012; Lee et al., 2013; Olkin, 2017; Olkin & Pledger, 2003). Clearly such a misnomer does tremendous disservice to this marginalized group and this is directly in conflict with our professional values of cultural humility, culturally informed care, and inclusive practice. As counseling psychologists, we need to include disability in conceptualizations of individual diversity and decisions about culturally informed care.

Definition of Disability

According to the Americans With Disabilities Act, a disability is defined as a physical or mental impairment that substantially limits one or more major life activity (1990). This definition, and the scope of disability is intentionally wide-reaching. Although the term "people with disabilities" or "persons with disabilities" often refers to a single population which are united within the disability experience, this group of people is diverse may have a widely differing experiences or needs. Disability is an aspect of human life which can take nearly innumerable forms ranging from readily apparent physical disability, to not obvious disabilities such as cognitive difficulties, and everything in between. As previously mentioned, in many ways the field of psychology is under-prepared to work with a wide margin of the population who has a disability. However, it is important to clarify what is meant by this assertion. Psychologists and other mental health professionals by trade are inherently well-prepared and trained to work with a variety of mental illnesses which otherwise can be disabling. However, in the context of this assertion disability refers to the broad range of disabilities which occur outside of mental illness or mental health diagnoses.

With this being said, one may wonder if psychologists and other mental health clinicians will encounter the remainder of the disability population in their work. However, recent evidence would suggest it is exceedingly likely that all mental health clinicians will encounter PWDs in their clinical practice. At the time of this writing, the most recent study which explored the mental distress of PWDs, illuminated that PWDs experience more mental distress than those without disabilities (Cree et al., 2020). Specifically, it was estimated that 17.4 million adults with disabilities experienced frequent mental distress, which was further associated with outcomes such as poor health behaviors, increased use of health services, and increased limitations in daily life (Cree et al., 2020). Consequently, it is imperative that psychologists and other mental health professionals are prepared when PWDs seek mental health services. Unfortunately, there are several gaps in our current understanding which limit the preparedness of the mental health field. The gaps in our foundational understanding of the disability experience, has contributed to a significantly reduced pool of evidence-based practice recommendations for working with PWDs. To explore these gaps further, it is important to acknowledge disability's position as a marginalized identity.

Social Position of Disability

In order to better understand the salience of disability, one must first understand the perceptions of disability in society and the subsequent impacts of this social position. People with disabilities share several characteristics with other marginalized groups of people in society, perhaps the most notable of which is the experience of discrimination (Olkin, 2002). Disability is perceived as a difference from the norm or from the majority cultural group, and having a disability often is met with prejudicial views from others. Thus, having a disability often is stigmatizing and represents a delineation from others based on a perceived lack of individual competence or ability (Bogart, 2014).

The social perception of disability as equivalent to, or synonymous with, a lack of individual competence creates many different challenges and barriers for PWDs. Discrimination based on disability status is pervasive, and some scholars have contended that the amount of prejudice experienced by PWDs exceeds the amount of prejudice experienced by other marginalized groups (Albrecht, 1992; Olkin, 2002; Smart & Smart, 2006). This prejudice occurs in many different domains, including employment, housing, education, transportation, and access to public services such as voting (Albrecht, 1992; Americans With Disabilities Act, 1990; Olkin, 2002, 2017). Further, recent evidence suggests that the implicit biases had toward PWDs has been increasing over time (Harder et al., 2019). Disability often is systemically separated and othered in society. This separation is observed through the presence of separate entrances, transportation services, housing, and classrooms, among numerous other examples (Olkin, 2002, 2017; Olkin & Pledger, 2003).

Examining the widespread nature of prejudice and discrimination towards PWDs, one can reasonably deduct the monumental impacts which can be associated with these experiences. The social model of disability (Oliver, 1983, 2013) argues that the barriers created by prejudice, stigma, and discrimination in society create more severe and impactful challenges than do the physical, emotional, and/or cognitive functional impairments or limitations associated with a disability diagnosis (Hogan, 2019; Olkin, 2002, 2017; Olkin & Pledger, 2003; Smart & Smart, 2006). However, despite apparent similarities between the experience of having a disability and other marginalized groups, disability often is excluded from discussions of multicultural competence or cultural humility among psychologists (Olkin, 2002, 2017). Clearly, we need increased awareness and understanding of the widespread social challenges and multicultural considerations associated with a disability diagnosis.

Clinical Considerations

Disability is understudied and excluded from clinical training (Bluestone et al., 1996; Foley-Nicpon & Lee, 2012; Kemp & Mallinckrodt, 1996; Lee et al., 2013; Olkin, 2017; Olkin & Pledger, 2003). Unfortunately, many psychologists never will receive any formal training on disability in general, psychosocial aspects of disability, or disability-related considerations in mental health treatment (Kemp & Mallinckrodt, 1996; Olkin, 2008, 2017). Consequently, this lack of training and discussion of disability-related concerns in mental health treatment further perpetuates bias against people with disabilities and fosters the opportunity for clinicians to systematically contribute to their further oppression.

In studies examining mental health practitioner biases toward PWDs, it has been revealed that when presented with a clinical vignette that involved a PWD, counselors who had not received any prior training on disability-related issues were less likely to incorporate themes related to disability into their case conceptualizations (Kemp & Mallinckrodt, 1996). Further, clinicians who had not received any disability related training were more likely to conceptualize these vignettes in a way that reflected an overall negative bias towards PWDs (Kemp & Mallinckrodt, 1996). Sadly, despite evidence that even small amounts of training could prove to be effective in reducing bias among mental health practitioners toward PWDs (Kemp & Mallinckrodt, 1996), disability still remains absent in the majority of psychology training curricula (Bluestone et al., 1996; Olkin, 2008) and severely underrepresented in counseling psychology, counseling, and other mental health-related scholarship outside of the parameters of rehabilitation psychology (Foley-Nicpon & Lee, 2012; Lee et al., 2013). Further, an investigation of providers who commonly encounter PWDs, including teachers, rehabilitation providers, and mental health practitioners, revealed that the latter reported (a) being the least receptive of PWDs and (b) the highest rates of anxiety about working with PWDs than did any other group of providers (Thomas et al., 2011). The concern here is fundamental. It represents an inability of psychologists and other mental health practitioners to adequately identify and address disability-related concerns in treatment. Further, it illustrates how many psychologists may be practicing beyond their competence and inadvertently contributing to further oppression of PWDs. Ignorance or denial of disability and its associated challenges and barriers in its conceptualization only serves to extend the marginalization of people with disabilities and further, it makes psychological services less accessible to them.

This bias in treatment of PWDs has been termed diagnostic overshadowing, originally introduced by Reiss et al. (1982) when thinking about cognitive disabilities and is now used more broadly when discussing disability. Diagnostic overshadowing exists when the presence of a disability decreases the diagnostic significance of other abnormal behavior (Reiss et al., 1982). In other words, the presence of a disability creates a bias for clinicians when thinking about other potentially relevant symptoms. This occurs most commonly in one of two ways. First, clinicians have a natural tendency to attribute behavior to salient factors. Consequently, when a disability is readily apparent, abnormal behaviors or emotional concerns are largely viewed as consequences of the disability (Levitan & Reiss, 1983). Second, clinicians tend towards comparison. In other words, clinicians may view emotional distress when compared to the impacts of a physical, cognitive, or other disability and conclude incorrectly that the severity is not as great and thus of less concern or interest (Levitan & Reiss, 1983). Admittedly an older examination of diagnostic overshadowing highlighted how an individual with an intellectual disability, at the time referred to as mental retardation, could reasonably expect a 19% drop in diagnostic accuracy and mental health treatment recommendations when compared to others with similar symptom presentations without an accompanying disability (White et al., 1995). More recent examinations of diagnostic overshadowing unfortunately illustrate that not much has changed in the last 25 years. Diagnostic overshadowing bias unfortunately has shown to be strong enough to mask significant trauma including childhood sexual abuse, physical neglect, and exposure to violence (Kildahl et al., 2020). This bias exists across mental health treatment of PWDs and is an astronomical ethical concern. Simply stated, it is of the utmost importance that the field of psychology and mental health practice work to improve the availability of appropriate mental health care for PWDs. Consequently, this study aims to explore avenues for inclusive and effective treatment.

Previous research that has examined the experience of PWDs in mental health treatment has emphasized the importance of non-specific factors in the therapeutic relationship including the offering of a supportive experience, the fostering of a therapeutic alliance, and validation of the individual as a person who has a disability (Blue-Banning et al., 2004; Pert et al., 2013; Ridgeway, 2011). Of particular importance in these findings is a feeling of validation held by the participants collectively as people above and beyond their disability diagnoses (Blue-Banning et al., 2004; Ridgeway, 2011). In other words, this set of studies illuminates a common concern in mental health treatment for PWDs, in their being viewed primarily according to disability (e.g., a paralyzed person) rather than as a full and complete person who also has a disability (e.g. a person with paralysis). However, other literature also has illuminated the immense barriers that PWDs may experience when attempting to access mental health services. Some PWDs have noted that barriers such as challenges with insurance coverage and transportation (e.g., not having a car) are some aspects of inaccessibility. Perhaps more notably, PWDs also identified a lack of expertise among mental health service providers in disability related concerns and, consequently, a lack of choice in selecting adequate psychological services (Hampton et al., 2011). Thus, the question becomes; how can psychologists and other mental health practitioners work to better affirm PWDs and provide more accessible and effective mental health services for them?

Disability Identity

Perhaps one answer to creating more inclusive and effective treatment experiences for people with disabilities (PWDs) lies in better understanding how they view themselves and navigate their daily experience. Using the premises of Social Identity Theory (SIT; Tajfel et al., 1979), one can understand that an individual will strive to achieve or maintain a positive social identity, which is mainly based on favorable comparisons of group membership. However, when one minority group experiences more discrimination or prejudice in comparison to the majority group, members of that minority group may seek to improve their own social identity. This could be done through one's attempting to leave one's existing minority group in order to join another group that is more positively received by hiding one's minority traits, or by attempting to positively differentiate one's existing minority group by developing a greater sense of pride or acceptance (Tajfel et al., 1979).

Concerning disability specifically, PWDs can attempt to minimize or reduce their identity as it relates to disability and attempt to navigate between two social groups: disabled and non-disabled. However, as often is the case, the boundary between these groups is rarely truly permeable, and therefore the PWD often can be caught in between two social groups without being able to truly identify with either (Bogart, 2014; Olkin et al., 2019). Consequently, a PWD typically may adopt the majority groups norms and stigmatized values of disability, thus likely resulting in diminished self-esteem (Bogart, 2014). In contrast, a PWD instead can seek to improve their identity through their alignment and development of pride with their stigmatized identity as a PWD. In doing so, a PWD may attempt to promote more positive attributes of their disability as an integral component of human diversity and, in turn, perhaps question the existence of any/all stigma towards disability (Bogart, 2014).

This second option is known more commonly as the development of disability identity, described as, "a positive sense of self and feelings of connection to, or solidarity with, the disability community" (Dunn & Burcaw, 2013, p. 148). While disability identity has been speculated to have protective effects against the impact of disability-related stigma and discrimination, this concept has only been minimally explored in the literature. A thorough review of the disability identity literature completed by Forber-Pratt et al. (2017), revealed that despite numerous hypotheses about the possible impacts of disability identity, this literature base is substantially lacking in both quantity and coverage to assess this construct more properly. Two notable studies though that have explored disability identity provide a theoretical foundation for the present work. First, Bogart et al. (2018) explored the impact of disability identity on the relationship between stigma and self-esteem. Their research revealed that disability identity did partially mediate the negative relationship between disability-related stigma and self-esteem, providing foundational evidence for the protective effects of disability identity. Further, an earlier study by Bogart (2015) examined the effects of disability identity among a sample of participants with multiple sclerosis (MS). Findings indicated that stronger disability identity among these participants was a unique predictor of lower psychological distress, specifically regarding anxiety and depressive symptoms. Taking these two studies into account, it may be that disability identity perhaps serves as a uniquely positioned construct, both in helping clinicians to better understand the PWD experience and in providing a potential target for therapeutic intervention. In other words, disability identity may be a unique component of the PWD experience and development of this identity may have potential psychosocial benefits in mental health treatment such as improving quality of life and reducing psychological distress. Consequently, it is imperative that psychologists work to better understand this phenomenon and how it may contribute to providing culturally informed care for PWDs.

Rationale

Disability is becoming an increasingly prevalent experience. With the population of adults in the U.S. increasing and higher rates of disability typically found among older adults, the likelihood for a psychologist to encounter a PWD in treatment continues to grow (Okoro et al., 2018; Olkin, 2002). Therefore, it has become imperative for counseling psychologists to understand better the social complexities of disability and how having a disability potentially may alter treatment considerations and therapeutic interventions for their clients. Consequently, counseling psychologists must become better able to recognize and to comprehend the effects that developing or holding a sense of disability identity may have on their clients' quality of life and degree of felt psychological distress.

Presently, there is minimal scholarship on disability in the counseling psychology literature and even less scholarship that focuses on disability identity as a central construct (Forber-Pratt et al., 2017). Despite numerous studies that have demonstrated positive impacts of identifying with a traditionally marginalized identity in other minority groups including according to race and ethnicity (Branscombe et al., 1999; Cronin et al., 2012; Schmitt et al., 2002, 2003), the effects of disability identity have yet to be explored thoroughly.

An understanding of disability identity is needed for a multitude of reasons. However, perhaps none are more important than to give credence to disability in conversations of intersectionality, cultural humility, and diversity in counseling psychology. Despite numerous calls to action for increased research focus on disability, disability research in counseling literature remains exceedingly sparse, and consequently, the majority of psychologists are not receiving any training or information about how to approach working with PWDs in their training (Kemp & Mallinckrodt, 1996; Olkin, 2008, 2017). This inadvertently has perpetuated a notion that counseling psychologists and other psychology practitioners outside the scope of rehabilitation psychology do not need to be competent in addressing many of these concerns and therefore also contributing to the marginalization of PWDs in seeking psychological services. Counseling psychology and other health service psychology in general should no longer allow themselves to pigeonhole this segment of the population in this way anymore. Further research in this area is needed so that counseling psychologists and other mental health clinicians can provide more culturally informed and accessible care for PWDs.

Statement of Purpose

The purpose of this study is to examine the various relationships between disability identity, disability-related stigma, psychological distress, and quality of life among people with disabilities. Specifically, this researcher aimed to identify the role that disability identity may play in moderating the effect of disability-related stigma on both quality of life and psychological distress among PWDs. In doing so, this researcher attempted to apply the Rejection Identification Model (RIM), originally proposed by Branscombe et al. (1999), to the construct of disability. In doing so, this researcher controlled for demographic variables including ethnicity, gender, and sexual orientation, in order to also assess for group comparisons.

Further, this researcher controlled for specific characteristics of the participants' disability that prior research has shown to impact an individual’s experience with disability, including age of disability onset, level of functional impairment, and obviousness of disability (e.g., mostly obvious vs. not obvious to others). Regarding age of disability onset, previous research has indicated that significant differences in amount of disability identity exist between individuals whose disability is a congenital diagnosis compared to those who acquired their disability later in life (Bogart, 2014). Additionally, researchers have speculated that the level of functional impairment or obviousness of one’s disability is likely to impact both the degree to which they identify with their disability as well as the amount of disability-related stigma that they experience (Olkin et al., 2019). By conducting this study, this research added to the growing literature base on disability identity, disability-related stigma, quality of life, and psychological distress for PWDs as well as provided direct considerations for psychologists and other mental health practitioners when working with PWDs.

It is hoped that psychologists using this research would be able to have a more established knowledge of possible ways to approach people with disabilities and the issues they may bring into treatment, as well as points for consideration in the conceptualizations of the scope of disability as it relates to the PWD's presenting concerns. Another benefit of this study was the provision of evidence for the RIM as it pertains to the experience of PWDs (Bogart et al., 2018; Branscombe et al., 1999). Finally, it is hoped that this study will raise awareness among counseling psychologists and other mental health practitioners to more regularly consider disability when thinking about intersectionality and multicultural identities. Further, it is hoped that this will help psychologists and other mental health practitioners consider how the presence of a disability may influence their treatment plan or experience in therapy for PWDs.

Research Questions

The research questions for this study are listed below:

Q1 How does disability identity predict the effect of disability-related stigma on quality of life experienced by people with disabilities?

Q2 How does disability identity predict the effect of disability-related stigma on psychological distress experienced by people with disabilities?

Q3 How does one’s disability experience, including onset, obviousness, and functional impact of one’s disability account for variance in one’s disability identity?

Q4 Does one’s intersectional identities (e.g. race, age, sexual orientation, gender identity, socioeconomic status, & level of education) predict their disability identity?

Limitations and Delimitations

A limitation of this study, as well as with other studies that have attempted to measure disability identity using quantitative methodology, is the lack of a well-established measure of disability identity. While very few studies have attempted to examine disability identity using quantitative means, those that have, have infrequently used a variety of different measures with varying levels of reliability and validity (Darling & Heckert, 2010; Hahn & Belt, 2004; Zapata, 2018). While this study used the most widely applied and supported quantitative measure of disability identity, the Personal Identity Scale (Hahn & Belt, 2004), it should be noted that this is only relatively speaking. Although results from this study will certainly generate additional reliability and validity data about this scale, future research examining disability identity may benefit from the development of a more comprehensive and robust measure of disability identity.

Another potential limitation of this study is the sampling procedure used to obtain participants. Participants were selected using convenience sampling through a disability-specific organization, whose membership resided in a single region of the country. It could be that this sampling procedure, inherently recruited more individuals who identify with their disability more strongly. Consequently, this sample may not be representative of individuals who do not view themselves as having a disability, but who would otherwise meet the definition of having a disability. Future studies may want to explore alternative means of sample recruitment to better capture the full range of experiences of people who have a disability.

A final limitation of this study was its use of online self-report measures to collect data. As with all self-report measures, the reliability of the data collected is inherently dependent on the reliability of participants' self-report which typically are subject to bias. Thus, trust in the data arrives from a trust that participants in the study were able to understand each item accurately and were able to answer as truthfully and objectively as possible (Remler & Van Ryzin, 2011).

Definitions of Terms

Acquired Disability. The onset or development of a disability later in life as opposed to congenitally. The development of an acquired disability often is associated with difficulties in psychosocial adaptation and, at times, dramatic changes in perception of self or identity (Bishop, 2005; Bogart, 2014).

Congenital Disability. A disability which has been present since an individual's birth. The development of identity for individuals with congenital disabilities has been theorized to follow a similar path of individuals without disabilities because of the lack of separation between the disability and view of oneself (Bishop, 2005; Bogart, 2014).

Disability Identity. The presence or possession of, “a positive sense of self and feelings of connection to, or solidarity with, the disability community” (Dunn & Burcaw, 2013, p. 148). This component of identity is thought to help PWDs to adjust or to adapt more effectively to their disability and to better navigate challenges which may be associated with one's disability including accessibility, ableism, or internalized stigma (Bogart, 2014; Bogart & Dunn, 2019; Forber-Pratt et al., 2017; Forber-Pratt & Zape, 2017). While individuals can typically identify with both positive and negative aspects of identity characteristics, historically disability identity is operationally defined as identification with the positive aspects of the disability experience.

Functional Impairment. The consequences or limitations of one's disability. These limitations must substantially impact one or more major life areas, which may include social or occupational areas in order to meet the definition of disability (Americans With Disabilities Act, 1990; Üstün & Kennedy, 2009).

Psychological Distress. A broad spectrum of emotional feelings, including normal feelings of sadness and worry, to more severe and disabling symptoms of depression and anxiety, including intrusive thoughts and social isolation (Zimmermann et al., 2015).

Quality of Life. Inherently, quality of life (QOL) is a construct that is difficult to define. In this study, it is defined as a multidimensional construct that encompasses a person's current life circumstances (Haas, 1999). It is composed primarily of a subjective sense of well-being, which spans all life domains including physical, social, psychological, and spiritual facets (Bishop, 2005; Haas, 1999).

Stigma. An indication, mark, or otherwise noticeable distinction associated with a person that holds a negative perception or connotation. Stigma is associated with elements of labeling, stereotyping, status-loss, or discrimination and occurs in a dynamic where there is a power differential between groups (Link & Phelan, 2001). Stigma can be thought of as an internalized process of perceived discrimination and has been shown to have adverse effects on psychological well-being (Branscombe et al., 1999).

Obviousness of Disability. The ability for others to observe or to not observe an individual's disability. Individuals with a disability that is not visible or readily apparent to others, known as a not obvious or previously termed an invisible disability, may have the choice as to whether or not to disclose their disability to others. Consequently, obviousness of disability has been associated with the degree to which an individual identifies with disability (Bogart, 2014; Olkin et al., 2019).

Chapter Summary

This chapter began with a brief summary of background information which illuminates the need for further exploration of disability within health-service psychology. Next, this chapter provided a working definition of disability as it pertains to this study and a description of the how people with disabilities are viewed in a social context. An overview of clinical considerations when working with people with disabilities was then provided, followed by a description and brief discussion of the central construct in this study, disability identity. This was followed by a description of the rationale and purpose for this research and the associated research questions this study aimed to investigate. This chapter concluded with a brief discussion of the preliminary limitations and delimitations identified in this research and a list of definitions for key terms. In Chapter II, the historical, theoretical, and empirical basis for the current study and its research questions are discussed in greater depth and detail.

CHAPTER II

REVIEW OF LITERATURE

This chapter reviews the historical, theoretical, and empirical basis for the current study and its research questions. It begins with an overview of the historical context of disability and how disability has been contextualized and approached in society. This is followed by a depiction of the importance of how disability is socially perceived and discussed, and then moves to explore how disability is situated as a unique aspect of human diversity. Further, this chapter goes on to situate the importance of considering the impact of disability for counseling psychologists, highlighting gaps in our current understanding and training. Current knowledge of important considerations in treatment of persons with disabilities (PWDs) are explored, followed by a theoretical discussion about the impacts of group membership and an explanation of the Rejection Identification Model. Important constructs used in this study including disability identity and quality of life are defined and reviewed. Finally, this chapter concludes with a statement of purpose for the present study, with a particular emphasis on the research gaps that this study aims to fill.

Historical Context of Disability

Disability is a natural phenomenon that occurs as part of human existence; over time, it has become increasingly present and relevant in our everyday experience. Estimates of the United States (U.S.) population that have a diagnosed disability are as high as 27 % (Taylor, 2018). However, despite the prevalence of disability, there is no uniform definition or even conceptualization of what "disability" means. Disability has been described from a wide variety of perspectives, including medical, economic, sociopolitical, administrative, religious perspectives, and more (Altman, 2001; Retief & Letsosa, 2018). These perspectives of disability help individuals to frame disability in the context of their everyday lives and help to provide frameworks for how disability is viewed. Several of these perspectives, models, and/or frameworks are described below.

The Moral Model of Disability

While the numbers of people with disabilities have expanded (Okoro et al., 2018; Taylor, 2018), so have our conceptualizations of disability. Disability often was originally conceptualized from a religious framework that stated that a person with a disability had been afflicted with their condition by an act of God. In this model, also known as the religious model of disability, PWDs were thought to have been punished for a particular sin, and observers with these views believed that the disability was used to signify or warn against the supposed behavior (Retief & Letsosa, 2018). This model often conceptualizes PWDs as morally inferior or as having questionable character, furthering a narrative of deficiency associated with disability (Retief & Letsosa, 2018). Similarly, an alternative view of disability from the religious narrative views PWDs as individuals who have had their faith tested by God (Niemann, 2005). From this perspective, PWDs have not yet passed the test of their faith and, therefore, have not yet been cured of their disabilities. Thus, disability again is a signal of moral inferiority according to this model.

Other interpretations of the moral model of disability perpetuate the idea that PWDs have mystical or spiritual abilities as a result of their conditions. In other words, due to the marked impairment in one area, the PWD thus has other abilities heightened, including the ability to perceive or transcend spiritually (Olkin, 1999). In this way, PWDs have been called upon by God or another higher power to demonstrate a divine purpose of some kind. This conceptualization furthers the idea that PWDs have a marked difference and are not comparable to non-disabled peers.

While the moral model of disability is not as pervasive as it once was, specifically the religious doctrine, the underlying philosophy of PWDs as being immoral or disability being a source of shame, still is frequently encountered. Many cultures today still hold views that disability is a source of shame for the PWD and the family of the PWD (Pfeiffer, 1998). Families have worked to hide members from society by removing PWDs from school, perhaps placing them in institutions instead, and thus limiting their ability to make contributions to society (Kaplan, 2000). The moral model of disability over time has constructed disability as a curse or affliction that signifies moral wrongdoing and is associated with shame attributed to the PWD and their family (Niemann, 2005). In doing so, the model has primarily contributed to a discriminatory and pejorative view of disability still seen in society today.

The Medical Model of Disability

One of the more commonly known and used models of disability is the medical or biomedical model of disability. From this framework, one's disability or condition is a medical problem that resides within the individual (Olkin, 1999). In contrast to the moral model of disability, disability in the medical model is discussed as a defect or imperfection in the bodily system but is not associated with any divine or religious meaning. Instead, disability is described as objectively pathological or an abnormality. From this perspective, the disability is something that is inherently bad or fundamentally negative and should, therefore, be treated in hopes of cure or amelioration (Retief & Letsosa, 2018). This inherently negative view of disability as a condition or experience that is objectively bad has furthered negative views of disability and contributed to questionable and largely unethical medical treatments of people with disabilities. For example, the medical model of disability contributed to the 1927 U.S. Supreme Court ruling in *Buck v. Bell* (1927), which found the forced sterilization of PWDs to be constitutional. While some may note that nearly a century has passed since this ruling, its lasting impacts are significant as states have maintained variations of this bill allowing legal forced sterilization of PWDs into the present day.

The medical model of disability holds in its definition that disabilities are deviations from typical human development. This belief also has resulted in many of the derogatory terminology directed towards PWDs such as "invalid," "cripple," and "retard." Further, this model has contributed to attempts to eliminate future disability through the eugenics movement and euthanasia of PWDs (Retief & Letsosa, 2018). The development of this terminology and the medical practices aimed at eliminating the incidence of disability have perpetuated a dichotomous viewpoint of humanity in which individuals either are non-disabled or disabled and in which those who are non-disabled are superior to PWDs. Thus, PWDs are to be viewed as outsiders to society rather than as equal members (Kaplan, 2000).

Another critique of the medical model of disability is that it often fails to fully contextualize the various situational or environmental factors which may be related to a person's life as a whole. In this way, this model examines the disability as the problem to be solved; however, it does not consider contextual or systemic factors that may contribute to or intensify the impairments experienced by the individual (Retief & Letsosa, 2018). Consequently, this model adversely and incompletely conceptualizes the nature of one's disability and propagates inaccurate notions about the impact of one's disability on their well-being.

While disability can have significant impacts on an individual's functioning, the medical model presumes that a PWD is "sick" and results in differences in expectations and opportunity for PWDs (Kaplan, 2000). This phenomenon perhaps is most clearly observed when examining the Social Security system in place in the U.S. (Kaplan, 2000). According to this system, the definition of disability was formerly summarized as a severe medical condition that creates an inability to work and is now defined as an inability to engage in “substantial gainful activity (Social Security Administration, 2019). Substantial gainful activity can be defined as work performed for pay or profit; or work of a nature generally performed for pay or profit; or work intended for profit whether or not a profit is realized (Social Security Administration, 2019). This definition creates significant systemic barriers for PWD as in order to receive the benefits of these public assistance programs, PWDs must refrain from working. This model furthers the notion that PWDs are “less than” and do not possess the same capabilities as their non-disabled counterparts.

The Social Model of Disability

Departing from conceptualizations of disability as a negative attribute or imperfection possessed by the individual is the social model of disability (Oliver, 1983, 2013). This model, also referred to as the sociopolitical or minority model of disability, represents a dramatic shift in perspective from both the moral and medical models as it emphasizes the explanation and description of contextual factors associated with actual life for people with disabilities. The concept underlying this model argues that for the majority of PWDs, the discrimination that they experience in day-to-day life in broader society along with barriers created by the built environment, is a more significant obstacle than are the actual medical impairments or functional limitations imposed by the disability itself (Hogan, 2019; Olkin, 2002; Smart & Smart, 2006).

Madeline Will (as cited in Weisberger, 1991), former assistant secretary of education and head of the Office of Special Education and Rehabilitation Services, highlighted this perspective:

> Most disabled people …will tell you that despite what everyone thinks, the disability itself is not what makes everything different. What causes the difficulties are the attitudes society has about being disabled, attitudes that make a disabled person embarrassed, insecure, uncomfortable, dependent. Of course, disabled people rarely talk about the quality of life. But it has precious little to do with deformity and a great deal to do with society's own defects. (p. 6)

Unlike the moral and medical models, the social model of disability frames PWDs as a minority group who have been marginalized by the society in which they interact and exist. This model or conceptualization of disability argues against the inferior, dependent, and previously stigmatizing definitions of disability. Instead, it postulates that the characteristics of stigmatization, prejudice, discrimination, and inferiority are not inevitable or unavoidable attributes of disability (Smart & Smart, 2006). Therefore, this model argues that for any meaningful change in the impact of disability to occur, responsibility must be directed towards the broader society rather than towards one's adjustment or rehabilitation to disability (Retief & Letsosa, 2018). In other words, just as the disability and its impairments are concepts constructed by society, society holds the capability to deconstruct and change the way that disability exists in our world (Oliver, 2013; Smart & Smart, 2006).

While the sociopolitical model of disability argues that stigma, prejudice, and discrimination are not inevitable characteristics of disability, they nevertheless are pervasive in the daily lives of PWDs. Some argue that the degrees of prejudice and discrimination experienced by PWDs tends to be more persistent and pervasive than what is experienced by other marginalized groups of people (Albrecht, 1992; Olkin, 2002; Smart & Smart, 2006). Expressly, it has been noted that PWDs often are met with perpetual negative attitudes from others, including employers (Albrecht, 1992). Researchers have articulated that discrimination has a more negative impact on overall life satisfaction than does a diagnosis of disability (Daley et al., 2018). This difference in experience was recognized with the Americans With Disabilities Act (1990) which asserted that unlike other marginalized or minority groups who have experienced discrimination based on race, color, sex, nationality, religion, or age, those who have experienced it based on disability have not had the option for legal recourse or action to address such concerns. Further, the ADA described that discrimination against PWDs has been a pervasive social problem and that discrimination is encountered in many societal systems, including employment, housing, education, transportation, and access to public services such as voting (1990). While this legislation is 30 years old at this time, implicit bias and prejudice towards PWDs still exists. Evidence from a recent study indicates that implicit bias towards PWDs has been increasing over time, possibly due to the increased visibility of PWDs in school, work, and other societal settings (Harder et al., 2019).

It is clear that in many ways the actions of society which long has been influenced by models of disability that conceptualized disability as an inherently negative quality, have contributed further to the marginalization and stigmatization of PWDs. Thus, in response, further influences of the social model of disability can be seen in the development of a stronger identity associated with disability. This piece of the social model extends to argue that disability is not inherently harmful, but rather it actually can hold positive identity characteristics (Brewer, 2002). This component has encouraged and influenced many PWDs to develop a disability community and adopt a more positive self-image, one that celebrates pride in disability (Darling & Heckert, 2010).

Purpose of Models of Disability

As many models of disability exist, it is essential to answer questions about their utility and purpose. As aforementioned, models of disability have clear, and at times dramatic, impacts on the view and perspective of disabilities within a society, and each model attempts to answer the question, "What is a disability?" In doing so, each model focuses on a single dimension of the disability experience such as perceived morality or medical limitations, thus in turn reducing the broader perspective of disability into a unidimensional definition (Smart & Smart, 2006). Therefore, it is essential to recognize that the models and conceptualizations of disability hold a large amount of power in directing and defining a person with a disability’s actual societal experiences.

These models each not only provide a unique definition of disability, but they also consequently attribute a source of blame for the disability through attempting to answer questions about the disability’s etiology. Consequently, these models extend beyond shaping the views of society, and contribute further to how PWDs view themselves. For example, the medical model provides diagnostic labels and determines a defined etiology (Retief & Letsosa, 2018; Smart & Smart, 2006). In doing so, the medical model of disability facilitates a predefined set of assumptions and beliefs that the PWD should hold about themselves and about their expected outcomes in life.

It is clear that these models of disability are important, having immense impacts on societal perspectives about disability and PWDs. Likewise, they also have distinct impacts on how PWDs may view themselves. Therefore, it is critical to initially identify the model of disability used to frame and approach the present research. Consistent with the *Multicultural Guidelines: An Ecological Approach to Context, Identity, and Intersectionality*, henceforth referred to as the APA’s Multicultural Guidelines, created and published by the American Psychological Association (2017), it is a goal of this research to recognize the historical and contemporary experiences of PWD's experience with power, privilege, and oppression. Similarly, a goal is to provide evidence for culturally adaptive interventions in psychotherapy for PWDs. For this reason, this research is primarily informed by the social model of disability and aims to recognize the widespread impacts of the present societal context and how those may or may not influence a PWD as a client in therapy. Using this model allows this research to approach the current gaps in the literature, which are highlighted by a lack of understanding of the disability experience as diversity and the resulting impacts and clinical considerations which may be relevant as a result.

Disability as Diversity

Using the social model of disability as a framework, this study acknowledges people with disabilities as the largest minority group in the U.S. (Bogart & Dunn, 2019). PWDs share many characteristics with other minority groups, most notably the experience of stigma, prejudice, and discrimination (Olkin, 2002). PWDs are similar to many majority groups as they are seen aside from the majority perspective or the normative mainline cultural group. Because of this, pressure to emulate the majority group culture and to act non-disabled is often present. Further, PWDs are typically underrepresented in many professions, misrepresented in scholarly research, and underserved as clients in psychotherapy (Olkin, 2002). For example, an examination of unemployment rates revealed that people with disabilities are largely underemployed. Specifically, PWDs are unemployed at rates nearly twice as high as non-disabled peers (Colella & Bruyère, 2011; Macias et al., 2001).

However, there are very crucial and notable differences that exist between the experiences of PWDs and those of other marginalized groups. Perhaps the most striking difference is the lack of social awareness of the systemic nature of the marginalization of PWDs. As made famous during the civil rights movement, Brown v. Board of Education cemented the doctrine that "Separate is not Equal" in its landmark ruling (1954). However, “separate” is the standard for PWDs at present, who often have separate entrances, buses, drinking fountains, restrooms, and classrooms (Olkin, 2002). While some may argue that the separate nature of some of these facilities were designed to increase accessibility for PWDs, it should also be acknowledged that accessibility is a relative term. Take for example, an accessible restroom in an academic building on a college campus. While typically one may expect to see a restroom on each floor, an accessible restroom may only be available on one floor. These types of accessible facilities while great in a vacuum are also often surrounded by additional barriers to their access. Further, unlike many other marginalized or minority groups, the experience of disability often can include physical symptoms such as pain and fatigue. These points are not to argue that the marginalization of PWDs in some way is more significant than the marginalization experienced by other groups, but rather in an effort to recognize the legitimacy of the disability experience.

Recognition of the disability experience as an aspect of diversity occurs less frequently than one might expect. The APA long has reflected its value of individual diversity and emphasis on ethical practice with diverse groups through both its *Standards of Accreditation for Health Service Psychology* (2019) and recently updated *Multicultural Guidelines* (2017) both which explicitly name disability as a distinctly diverse population. However, there is a notable lack of disability-related diversity scholarship in the field. In psychology, disability scholarship has been relegated to the specialty area of rehabilitation psychology and has not impactfully crossed into other disciplines of psychology. A 50-year content analysis of the *Journal of Counseling Psychology* revealed that disability was among the least-studied identity domains, with less than 1% of all articles focusing on disability (Lee et al., 2013). In contrast, other multicultural topics, such as gender/sex, comprised approximately 14% of scientific articles during the same period. Other reviews of high-impact counseling journals have found comparable results; only 18 empirical studies on disability were published between 1990 and 2010, of which the majority focused on specific diagnoses of disability such as Attention Deficit/ Hyperactivity Disorder rather than broader considerations for when counseling PWDs (Foley-Nicpon & Lee, 2012). This scarcity of disability-related scholarship in counseling psychology articulates a further "othering" of disability and implies that most psychologists do not need to be trained for, or knowledgeable about, disability issues (Olkin & Pledger, 2003; Woo et al., 2016). It is essential that, as psychologists, we work to address the gaps in our knowledge and training related to disability as a distinct variable of individual diversity to effectively provide culturally informed care.

Clinical Relevance of Disability

The absence of training for psychologists in disability-related issues is especially concerning when considering societal trends relating to disability. As previously stated, approximately 27% of the U.S. population has some type of disability (Taylor, 2018). This percentage has substantially increased over past decades and people with disabilities now are exceedingly more likely to live independently and to be integrated into the community than ever before (Olkin & Pledger, 2003). Much of this is due to changes in the law, which have provided increased federal protection and support for PWDs, ultimately working to reduce systemic barriers that they face. For example, the Individuals with Disabilities Education Act (IDEA) of 2004, the succession law to the Education for All Handicapped Children Act (EAHCA) of 1975, vastly improved access to education for PWDs. IDEA specifically mandated that PWDs be educated in the "least restrictive environment," meaning that PWDs now were being included often in the regular classroom rather than relegated to separate special education classrooms (IDEA, 2004; EAHCA, 1975). IDEA has also created a significant proportion of PWDs that are persisting beyond high school and into both higher education and employment settings (Smith et al., 2008).

Further, PWDs who are persisting beyond high school into higher education or employment opportunities also have received increased access to these opportunities due to additional legislation. Section 504 of the Rehabilitation Act (1973) in conjunction with the Americans With Disabilities Act (1990) have broadly increased these opportunities for PWDs as they require educational institutions and potential employers to provide "reasonable accommodations" to PWDs who are otherwise capable and qualified for the tasks required of them in these settings. An example of this may be a student who is blind and therefore receives their textbooks for coursework in an audio or brailed format so as to allow for increased access to the course material. It is important to stress that these changes have created more access to both educational and employment opportunities; however, they have not eliminated the plethora of societal barriers still often experienced by PWDs.

With increased presence of PWDs in societal interactions, one would expect that the need for mental health practitioners, including counselors and psychologists, to provide services to PWDs also has increased. These services may cover a variety of topics, including but certainly not limited to educational and career development, stress, anxiety, depression, and relationship issues (Smith et al., 2008). These issues, while being common concerns of many clients, often are overshadowed by the presence and nature of a disability. Consequently, mental health practitioners need to be increasingly cognizant and aware of the challenges that PWDs may face in society and be prepared to work with the different ways that the complex intersectionality of disability as an identity and the experience of ableism in society can adversely affect their client's lives (Bogart & Dunn, 2019). However, specific training for mental health practitioners related to disability is not readily available, and therefore more research to understand the complexities of the disability experience is sorely needed.

Psychologist Training in Disability-Related Concerns

Despite 27% of the U.S. population estimated to have some type of disability, it is exceedingly likely that most psychologists and other mental health practitioners have not received any formal training with relation to providing (Olkin, 2017; Taylor, 2018). The isolation of disability research to rehabilitation psychology unfortunately has siloed the available information away from the majority of clinicians (Olkin & Pledger, 2003). Consequently, it may be that most clinicians have not received any training or information about the unique challenges and perspectives relevant to working with PWDs. Historical reviews of graduate training curricula in psychology indicate that "disability" receives the least amount of coverage compared to other diversity issues examined (Kemp & Mallinckrodt, 1996). Further, among the vast majority of training curricula, training in disability-related concerns or issues is absent (Bluestone et al., 1996). A more recent investigation articulated that of the 210 graduate training programs in professional psychology at the time, only seven taught a course that focused on psychosocial aspects of disability (Olkin, 2008). Then, one may wonder what the potential impacts of the absence of disability-specific training has on psychologists when working with PWDs, and consequently, what impacts this lack of training may have on these clients.

Some research has explored the consequences of this lack of disability-specific training in psychology more directly. Kemp and Mallinckrodt (1996) examined the effects of disability-specific training by asking counselors to watch one of two 30-minute analogs of a therapy client. Each analog was identical except for 19 seconds that illustrated the client as either non-disabled or disabled (i.e., using a wheelchair to indicate that the person had a visually evident disability). After viewing the analog, counselors were asked to complete a case conceptualization activity followed by measures that assessed their attitudes towards disability. In this study, approximately half of the participants reported that they had received some training in disability, although notably, most of them reported that said training experiences had been very brief (Kemp & Mallinckrodt, 1996). However, the authors found that perhaps even brief training that focused on disability could be effective in reducing biases in case conceptualization and treatment planning for PWDs. Particularly, it was observed that counselors who had received no clinical training related to working with PWDs were significantly more likely to focus on extraneous issues not related to the core themes of the case analog. Notably, the analog was designed to include significant themes including previous sexual abuse; however, those clinicians without disability-specific training were significantly less likely to identify or emphasize specific themes related to disability which may be important in the treatment of sexual abuse survivors. Furthermore, those therapists without this specialized training were significantly more likely to conceptualize PWDs in ways that reflected an overall negative bias towards PWDs. This study highlights a continuous problem in the mental health counseling of PWDs. Often counseling of PWDs contains both errors of commission and omission (Kemp & Mallinckrodt, 1996). Consequently, therapists may be exceedingly likely to make many of the mistakes often associated with cross-cultural counseling, including either disregarding one’s marginalized identity and discounting its importance, or instead overinflating its importance and thus omitting critical case information in treatment (Olkin, 2017).

This highlighted issue is fundamental, and a lack of ability for mental health practitioners, including psychologists, to adequately recognize and address potential disability-related themes is an ethical concern (APA, 2017). Without a base knowledge of disability themes and an acknowledgment of disability as a marginalized identity, practitioners are not able to adequately consider the cultural and societal context which is directly influencing the experience of their clients. When working with clients who have a disability and with all clients, it is essential to be able to consider the impact of social stigma, marginalization, discrimination, power, and social connection (Olkin, 2017). This article highlights the possibility that even small amounts of training ultimately could reduce the amount of bias toward PWDs, help to reduce stigma, and validate the experience of PWDs (Kemp & Mallinckrodt, 1996). However, bias in mental health treatment of PWDs is not a new phenomenon. Studies have illustrated this bias known as diagnostic overshadowing, since the early 1980s.

Diagnostic Overshadowing

Diagnostic overshadowing was originally introduced by Reiss et al. (1982) and has sense been expanded from a specific focus on intellectual disability to being broadly applicable to all disabilities. Diagnostic overshadowing can be defined as bias which exists when the presence of a disability decreases the diagnostic significance of other abnormal or symptomatic behavior (Reiss et al., 1982). As mentioned in Chapter 1, this bias materializes in one of two ways. First, mental health providers may have a natural tendency to attribute behavior to factors which appear to be the most salient. In other words, when a disability is readily apparent, abnormal behaviors or emotional concerns are largely viewed as consequences of the disability ignoring the possibility of a cooccurring mental health diagnosis (Levitan & Reiss, 1983). Second, clinicians may tend towards comparison, consequently underestimating the impact of emotional symptoms. Specifically, clinicians may view emotional distress in comparison to the impacts of a physical, cognitive, or other disability and conclude incorrectly that the severity of these symptoms is not as great when compared to the presence of a disability and thus is of less concern or interest (Levitan & Reiss, 1983). At one point in time, an examination of diagnostic overshadowing highlighted how an individual with an intellectual disability could reasonably expect a 19% drop in diagnostic accuracy and mental health treatment recommendations when compared to others with similar symptom presentations without an accompanying disability (White et al., 1995). Since this time further investigations of diagnostic overshadowing have illuminated the perpetual presence of this frightening bias in mental health treatment for patients with a disability.

The diagnostic overshadowing bias is ever present, regardless of the overall saliency of one's disability (White et al., 1995). Research has demonstrated that despite previous hypotheses that articulated that the bias would decrease as one's disability decreased in overall salience, for example as IQ approached average cognitive functioning in people with intellectual disability, the bias remains robust in its strength (White et al., 1995). It is important to note that much of the literature which examines diagnostic overshadowing in mental health focuses on the masking effects of intellectual or developmental disability (Jopp & Keys, 2001; Manohar et al., 2016; Mason & Scior, 2004). However, there is also a significant literature base which details diagnostic overshadowing bias in people with physical disability in other healthcare professions. For example, one recent study has shown that patients who have a physical disability are likely to experience lower rates of cancer screening and substandard cancer care when compared to non-disabled peers (Agaronnik et al., 2021). Unfortunately, this bias is so robust in nature that even rehabilitation providers, who are specifically trained to work with PWDs, exhibited the bias in their own care of both patients with physical disabilities and intellectual disabilities.

The diagnostic overshadowing bias is a point of major concern in the mental health treatment of PWDs. Its presence raises questions about the quality of mental health care available for PWDs and about the evidence base for efficacious clinical practice. One could argue that the diagnostic overshadowing bias is a glaring hole in the training of mental health clinicians. Consequently, it is important to understand further how mental health treatment is currently conducted for PWDs.

Current Psychotherapy with People with Disabilities

Similar to the lack of disability-related training obtained by many psychologists, research on disability-related issues in mental health treatment is also exceedingly sparse. It is important to note that there exists extensive research on psychosocial adaptation to acquired disability and techniques for working with PWDs in the rehabilitation psychology literature. However, the focus in the present work is to examine literature outside of this specialty area specifically as it relates to general mental health treatment. As previously mentioned, it is exceedingly likely that the majority of PWDs are receiving mental health treatment from someone outside of the rehabilitation psychology specialty (Olkin & Pledger, 2003).

People with Disabilities in Mental Health Treatment: Client Perspectives

Qualitative research has provided some insight into the perspectives of people with disabilities in psychotherapy. However, due to the limited nature of research on PWDs, which often focuses on specific diagnoses of disability, general conclusions about mental health treatment for PWDs are difficult to draw. That being said, research strongly demonstrates that the common or nonspecific factors of the therapeutic relationship are equally as crucial for PWDs as they are for people without disabilities (Olkin, 2017; Pert et al., 2013). For example, one examination of cognitive behavioral therapy for individuals with mild intellectual disabilities (ID) highlighted the importance of active listening for PWDs in therapy (Pert et al., 2013). The authors noted that the relationship is a critical component of therapy and that in many ways, therapy can be one of the few times that people with ID can engage with active and patient listeners. From the participants' perspective, they noted that therapy afforded them a substantially supportive experience and felt warmth, empathy, and validation from their therapists.

From a similar validation perspective, research has demonstrated that both adults with psychiatric disabilities and parents of children with disabilities noted that when working with PWDs, there was an increased importance of conceptualizing from a person first perspective (Blue-Banning et al., 2004; Ridgeway, 2011). In both studies, participants emphasized the importance of being viewed as more than just a disability diagnosis or medical case, but rather as a full and complete PWD. This information provides special consideration for practitioners to be aware of the implicit and explicit meanings of their language and behaviors in session. The use of certain verbiage or terminology which are no longer in use due to inaccuracy or now being pejorative, such as “retardation” or “cripple,” can influence poor and negative self-perceptions about one’s disability (Stuntzner & Hartley, 2014).

One notable concern is the existence of significant barriers to accessing mental health services for PWDs. One study looking at access to various health services for women with multiple sclerosis (MS), spina bifida, or spinal cord injury shed light on very interesting themes regarding their experiences (Hampton et al., 2011). The majority of participants expressed a need for psychological services. However, they also identified barriers above and beyond apparent barriers such as insurance coverage and transportation (e.g., having a car). Instead, the participants noted that a lack of expertise in disability related concerns among mental health service providers led to minimal choices for selecting psychological services, and that this lack of expertise formed a significant barrier to access care. It is important to note that this lack of expertise is an additional barrier on top of barriers associated with physical accessibility of the space where services were performed or available, such as buildings with poor parking, inaccessible hallways, or inaccessible offices. This study highlights yet another systemic challenge for PWDs. Despite a desire for mental health services, there are many significant and pervasive barriers to access this care.

People with Disabilities in Mental Health Treatment: Provider Perspectives

Further research also has started to explore the perspectives of providers who work with people who have a variety of disabilities. Pattison (2005) completed a mixed-methods study that examined the nature of therapy for people with various learning disabilities through a survey and semi-structured interviews of mental health providers in the United Kingdom. From this study, Pattison noted six indicators which provided a model for an inclusive mental health practice which included (a) a proactive approach to inclusion in their practice, (b) a focus on building relationships and rapport; sentiments which were echoed by clients with disabilities (Blue-Banning et al., 2004; Pert et al., 2013; Ridgeway, 2011). Further, Pattison (2005) noted the importance of (c) inclusivity of policies and (d) initial assessments and (e) the ability to be flexible as counselors in approach when working with people with disabilities. These accessible changes may include making accommodations or modifying materials such as offering digitally readable formats to ensure improved accessibility. Finally, as has been previously stressed, the final area of importance for an inclusive practice was (f) going outside of one's practice for training and engaging in advocacy for people with disabilities (Pattison, 2005).

However, despite these implications for PWD-inclusive mental health practice, examinations of practitioner views of PWDs have consistently illustrated a poor picture of the currently available mental health services. Thomas et al. (2011) explored perceptions of PWDs by teachers, rehabilitation providers, and counselors through a survey that assessed views towards people with physical disabilities and mental illness. Interestingly, when compared to the other two groups, counselors surveyed in this study reported being the least receptive toward PWDs, as well as the highest amount of anxiety about working with PWDs than did the teachers and rehabilitation providers. Such increased anxiety and diminished receptiveness toward PWDs likely would influence the quality of mental health care received by PWDs as clients. Such findings again raise essential questions about the amount and quality of training received for general mental health providers in working with disability as an aspect of individual diversity. As previously mentioned, even limited amounts of training in working with PWDs can have dramatic impacts on therapeutic treatment. Even minimal training leads to less biased and more accurate conceptualizations of treatment for PWDs (Kemp & Mallinckrodt, 1996; Olkin & Pledger, 2003).

Palombi (2008) reported that inadequate training could lead to exponentially increasing clinical treatment errors which diminish the experience of PWDs. According to Palombi, it is a common occurrence for mental health practitioners to conceptualize the difficulties or challenges of a case without consideration of the client's disability, thus minimizing the potential impacts that the disability may be having on an individual (2008). Thus, concerns may be conceptualized as a lack of confidence without considering the pervasive nature of systemic barriers and discrimination, which are likely to impact the presenting concern. Ignorance or denial of the existence of disability in conceptualization of treatment goals and presenting concerns, in turn, serves to extend the marginalization of PWDs. In addition to Palombi (2008), other research has suggested there to be negative impacts when practitioners over-emphasize the impact of disability. Abels (2008) described the importance of viewing an individual's disability in the context of their broader identity rather than as the single identifying feature or characteristic. Often it is assumed that disability is the sole cause of the impacts or difficulties in an individual's life, or that the presence of a disability must be associated with psychopathology such as depression. However, Abels emphasized the importance of not assuming that a causal link exists between the two or otherwise inflating the role of disability as it relates to the presenting concern in therapy (2008).

Takeaways Regarding Mental Health Treatment with People with Disabilities

As one can observe, the literature base on outpatient psychotherapy for those with disabilities is exceedingly sparse, and many avenues are left untraveled at this point in time. The emphasis on evidence-based practice in psychology (APA, 2006) has expanded tremendously in recent years; however, the literature as it relates to outpatient psychotherapy with PWDs is lagging. Most studies that do focus on evidence-based therapy, often exclude PWDs when selecting participants in an effort to control for extraneous variables (Olkin & Taliaferro, 2006). Yet these investigations often include or even emphasize people with other marginalized identities. This ultimately has contributed to a deficit of information directly related to evidence-based practice when working with PWDs.

Some studies have provided general tips for mental health practitioners to consider in mental health treatment with PWDs (Stuntzner & Hartley, 2014). While not an all-encompassing list of considerations for practitioners to acknowledge and to be aware of in their practice, some have emphasized the importance of practitioners giving credence to the disability experience and in acknowledging that the expressed negative experiences that are associated with disability are in fact legitimate (Stuntzner, 2012; Stuntzner & Hartley, 2014). Further, as one may assume, attention is drawn to the potential negative impact of labels or diagnoses and the importance of treating a PWD as a human being rather than their diagnoses (Blue-Banning et al., 2004; Ridgeway, 2011; Stuntzner, 2012; Stuntzner & Hartley, 2014). In line with this, Stuntzner (2012) noted the importance of understanding that a PWD knows their own body and experiences and consequently it is vital to understand how a PWD describes themselves and their experience. This provides a reminder for practitioners to pay attention to the PWD's strengths and abilities so that these can be integrated into the therapeutic work as well. Additionally, practitioners are encouraged to identify what counseling topics may make them uncomfortable, particularly regarding when working with disability, so that they may seek the necessary further training and supervision in order to be able to deal with these issues effectively. In other words, engaging in professional development focused on the exploration of one's own attitudes and biases which may impact the provision of counseling services with PWDs should be prerequisite (Stuntzner, 2012; Stuntzner & Hartley, 2014).

Taking this type of approach serves to affirm PWDs and to acknowledge the truth of their experience. Affirmative models of therapy have grown in popularity in recent years, and affirmative practices with other identity groups, particularly LGBT identified individuals, have shown promising results (Pachankis & Goldfried, 2004; Pepping et al., 2018; Shelton &

Delgado-Romero, 2011). Known by a variety of names including LGBTQ Affirmative Therapy, Queer Affirmative Therapy, LGBQ Affirmative Therapy, and others, this approach can be summed as, "the integration of knowledge and awareness by the therapist of the unique developmental cultural aspects of LGBTQ individuals, the therapist's self-knowledge, and the translation of this knowledge and awareness into effective and helpful therapy skills at all stages of the therapeutic process" (Perez, 2007, p. 408). In other words, it is an acknowledgment of the unique circumstances that are associated with an LGBTQ identity and understanding the importance for practitioners to acknowledge their knowledge base, biases, and translating all to effective therapeutic practices. Many different templates all sharing common characteristics exist (Pepping et al., 2018), and a review of the literature provides positive impressions, noting that an affirmative stance has shown in multiple studies to reduce psychological symptomatology as well as to increase the use of practical coping skills (O'Shaughnessy & Speir, 2018).

Until recently, a complete affirmative model of considerations for therapy with PWDs had not been established. Olkin (2017) articulated a series of considerations and a case formulation template for therapy, which she named Disability - Affirmative Therapy (D-AT), which draws on many of the same principles as other affirming therapy predecessors. Olkin described D-AT as containing two distinct components, the first of which is a series of nine areas of consideration to be explored with PWDs (2017). These areas are meant to ensure that the therapist is neither ignoring the disability nor overinflating its importance, thus more genuinely understanding the intersection of the person's disability and their presenting concern in treatment. The second component of this therapeutic template is the stance of the therapist as viewing disability in the context of a social world as a naturally occurring phenomenon in life that will always exist. In other words, viewing disability as an identity or as an aspect of difference in the human experience.

Theoretical Background for this Study

Social Identity Theory

When thinking about disability as an identity, it is essential to more fully explore and understand the notion of identity as being associated with specific groups of people. Tajfel (1972) best defined social identity as an "individual's knowledge that he belongs to certain social groups together with some emotional and value significance to him of this group membership" (p. 292). These social groups, no matter their size, can provide a shared identity and can illustrate the distinct differences between this in-group and relevant out-groups. This concept, initially postulated as Social Identity Theory (SIT; Tajfel et al., 1979), assumes that human beings strive to maintain or to improve their self-esteem in order to obtain a positive self-concept. Further, it assumes that social groups are inherently associated either with positive or negative values connections. In this way, identity is established based on group membership that either can be positive or negative according to the evaluations of the group (Tajfel et al., 1979).

With these underlying assumptions, SIT argues for three general principles. The first principle is that individuals strive to achieve or maintain a positive social identity. Second, positive social identity is based in large part on the favorable comparisons that can be made between the in-group and the out-group. In other words, there must be a positively perceived differentiation or separation between groups in favor of the in-group. The third and final principle argues that when an individual's social identity is unsatisfactory, or otherwise not meeting that individual’s needs, they will attempt either to leave their existing group to join a group which is more positively received, or they will attempt to positively differentiate their existing group (Tajfel et al., 1979). These three core arguments of SIT have been the basis for vast scholarly research on intergroup behavior, which then provides interesting implications when considering disability and more broadly marginalized identities, discrimination, and prejudice.

Before Social Identity Theory, intergroup behavior, particularly intergroup conflict, was discussed through the lens of Muzafer Sherif's model of Realistic Conflict Theory (Sherif, 1966). In Sherif's work, he described individuals as promotively interdependent and noted that as they work together to reach mutual goals, they grow to like them and create bonds that form social groups (Hogg, 2016). Sherif then expanded his work to illustrate that when two groups are competing for a mutually exclusive goal, the groups engage in a competition that can escalate to high levels of intensity (Sherif, 1966). This fierce competition between groups is likely to include intergroup behaviors that are destructive or harmful towards the other group, such as derogatory behavior. Sherif noted that this idea was the basis for dehumanization, or more commonly prejudice and discrimination (Sherif, 1966). Tajfel thought highly of Sherif's work: however, he pondered the requirement of groups to compete for a mutually exclusive goal in order to observe the same pattern of intergroup behavior.

In establishing SIT, Tajfel set up what is now known as the minimal group paradigm through a series of classical experiments (Billig & Tajfel, 1973; Tajfel, 1970; Tajfel et al., 1971). The general principle of this paradigm is that individual participants, assigned to a group based on a trivial matter which has no true meaning, would have strong preferences for their assigned group that could be observed in their behavior. Through these experiments, it was found that even when the group participation was as meaningless as being randomly assigned to be as members of X or Y group, participants strongly favored their own identified group.

Resoundingly, decades of research have resulted from this theory (Nesdale, 1999; Phinney et al., 2007; Thibeault et al., 2018) and have found that even the most minimal group identification produces ethnocentrism and competitive intergroup behavior. This intergroup behavior, as one may imagine, can have predictable and, at times, destructive consequences.

As Tajfel (Tajfel et al., 1979) pointed out, social identity works to define an individual's self-concept and, therefore, how they are viewed by themselves and others. As a result, it is natural for individuals to adjust and to make comparisons between their in-group and a relevant out-group in a way that ensures that their group is positively distinct and differentiated. Thus, intergroup behavior can be described as high-status in-groups attempting to maintain a superiority, or as low-status groups attempting to shed negative stigmas or beliefs and instead promote positive attributes of the group (Brewer & Campbell, 1976; Hogg, 2016). However, the way in which an individual attempts to preserve their evaluations of self and strive for positive self-esteem can be dependent on their relationship to their in-group.

Depending on the context of a group and an individual's relationship within that group, they may hold different belief structures about the relationships between their social group and other social groups. One belief structure that is discussed in the literature is known as a social mobility belief structure. With this belief, individuals from low-status groups hold that the boundary between their group and the relevant comparison group is easy to cross or is permeable (Hogg, 2016). Due to this belief, individuals attempt to disidentify with their identified group and instead cross the boundary into the more favorable or higher status group. In other words, these individuals are attempting to pass as members of the comparison group. However, despite their effort, research demonstrates that these barriers between groups are rarely ever permeable, and individuals who disidentify from one group may find themselves to be caught in between the two groups, which can result in damaging psychosocial impacts for them (Bogart, 2014; Hogg, 2016).

In contrast, a social change belief structure holds that the distinction between groups is firm and, therefore, not permeable by group members. Individuals with this belief in low-status groups tend to engage in socially creative behaviors in order to redefine the value and positive attributes of their particular group to create a more favorable comparison to the higher status group (Hogg, 2016). This behavior attempts to minimize or to eliminate upward comparisons to out-groups, but instead may utilize lateral or downward comparisons when referencing other out-groups in order to preserve self-esteem. As one could reasonably assume, these behaviors and beliefs can contribute to often-observed conflictual interactions and negative views of other groups of people. In many ways, holding less than favorable views of other groups allows an individual to hold higher views of themselves based on their own group membership whatever that may be Hogg, 2016; Tajfel et al., 1979).

Social Identity Theory and Disability

Social identity theory holds many intriguing ideas that are relevant to how disability has been conceptualized societally. As individuals strive for a positive self-concept and to establish their identity based on a group membership, they also may seek to differentiate themselves from other groups in order to maintain self-esteem (Tajfel et al., 1979). Therefore, they may attempt to enhance the status of the group to which they belong by reinforcing certain positive attributes (Hogg, 2016). However, the implied effect of this is that doing so also might initiate prejudicial views toward other groups. When applying this notion disability, non-disabled individuals as a group have improved their self-esteem through a historical and pervasive prejudice toward people with disabilities. The identity of being a PWD thus is stigmatized heavily and represents a delineation based on a perceived lack of individual competence and ability (Bogart, 2014).

This concept largely stems from the aforementioned discussion of the pervasive nature of models that conceptualize disability, specifically being the medical model and previously the religious model. In both of these models, disability is viewed as a defect, a variation from the norm with inherently negative qualities and attributes that represent an objectively inferior social standing. Therefore, evaluations from the non-disabled majority group seek to further differentiate themselves from PWDs through prejudicial and discriminatory views and actions. This discrimination, or ableism, is characterized by the notion that disability is something to be fixed and that those who have a disability cannot function as full members of society (Smith et al., 2008). These assumptions are inescapable in much of society and have led to systemically active and passive discrimination being near omnipresent. These views have, for a long time, held disability from being discussed as an aspect of diversity or as a dimension of difference as it only was seen as a defect (Smith et al., 2008).

For PWDs, this distinct categorization into a negatively stereotyped social group presses one to attempt to manage this stigma and instead to strive for positive self-esteem in one of two ways. One, the PWD can attempt to minimize their disability and disidentify from the disability group. As aforementioned, the PWD then likely attempts to shift between the binary categorizations of people as either disabled or non-disabled. However, the boundary between social groups is not permeable. Therefore, the PWD likely is stuck without being able to truly identify with either group. The PWD may appear to be a member of the non-disabled majority group; however, when attempting to pass as a member of this group, typically it is accompanied with the adoption of majority group norms and values about the stigmatized group, resulting in diminished levels of self-esteem (Bogart, 2014). In other words, the PWD may adopt the majority group's potentially negative and prejudicial view of disability, which in turn could lead to more significant negative evaluations of oneself.

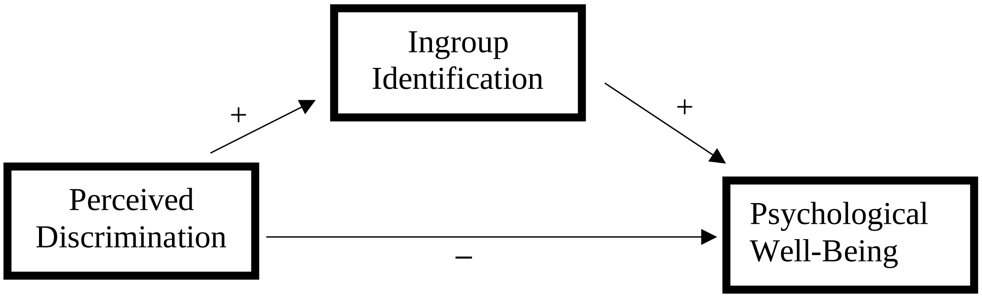
The other option for PWDs is to adopt a greater sense of acceptance with their stigmatized identity as a PWD and align more closely with the marginalized group. In this way, the PWD attempts to affirm their stigmatized identity and to promote positive attributes of their social group in a way that questions the existence of the stigma (Bogart, 2014). Identifying more strongly with a disability and emphasizing the positive characteristics of the group, in turn, seeks to increase a PWD's self-concept as a member of that group. However, the question remains as to whether or not this strategy is effective.

The Rejection Identification Model

Drawing on research from racial stigma (Branscombe et al., 1999; Cronin et al., 2012; Schmitt et al., 2002, 2003), identification with stigmatized traits has been shown to have protective effects against the negative impact of stigma. This concept is known as the rejection-identification model (RIM; Branscombe et al., 1999). It has long been established that the lasting effects of stigma and prejudice on an individual's psychological well-being are mostly adverse (Branscombe et al., 1999). However, as articulated in the RIM, the observed adverse effects of stigma can be moderated substantially by the positive identification of the individual with the stigmatized identity or traits. A diagram of this model is shown in Figure 1.

Figure 1

Rejection Identification Model



The RIM has been extensively examined and replicated with African American individuals and others who identify as racial and ethnic minorities indeed demonstrating that attributions or prejudice or perceived discrimination, otherwise known as stigma, do have a direct negative impact on psychological well-being (Branscombe et al., 1999; Cronin et al., 2012; Schmitt et al., 2002, 2003). However, potentially more interesting is that one's identification with the devalued group has been shown to have positive impacts on psychological well-being independent of the negative impacts of the perceived discrimination that drives the identification. Thus, this model can provide interesting food for thought when thinking about broader therapeutic interventions for individuals of devalued or marginalized identities.

As noted in the original work, due to the observed negative impact of attributions of prejudice, the "simplest suggestion for improving the well-being of devalued people might seem to be persuading de-valued group members to minimize their perceived pervasiveness of prejudice" (Branscombe et al., 1999, p. 146). However, as the authors articulated, evidence suggests that minority identified individuals often already attempt to minimize the prejudice that they experience as a self-protective strategy. Thus, if minimizing the experience of prejudice is not the answer to increased psychological well-being, then what is?

The RIM would suggest that the placing of a focus and emphasis on minority group identification may be the best predictor of psychological well-being among devalued or marginalized groups (Branscombe et al., 1999). This identification may provide not just a buffer against instances of prejudice and discrimination, but also a community and bonding aspect which allows individuals to celebrate these aspects of their identity. Although theoretically, the RIM seems to be a strong fit for working with PWDs, the impact of identification with a disability, otherwise known as disability identity, on psychological well-being or subjective quality of life recently has only been minimally explored. It is imperative to understand how this model potentially impacts PWDs in order to better help mental health practitioners make evidence-based decisions when working with PWDs.

Disability Identity

In-group identification for people with disabilities is commonly is referred to as disability identity. At this point, it makes sense to ask what it means to have a disability identity or, in other words, how disability identity is defined. This question is one that comes with some variability in responses throughout the literature. However, it is generally accepted that disability identity as a concept suggests that the person's definition of themselves has incorporated disability. This incorporation can be both positive and negative. However, typically an identity includes both an evaluative and cognitive component, thus including both, "I am a person with a disability" and "I am proud to be a person with a disability" or similar statements (Darling & Heckert, 2010). Disability identity in research typically refers to a positive disability identity, which can be further explained as a positive sense of self that incorporates and includes one's disability (Dunn & Burcaw, 2013).

The psychological impacts of disability identity often are discussed, but notably, this concept is researched much less often. Bogart et al. (2018) examined positive identification with disability, which they termed "disability pride" and its impact on self-esteem using the framework of the RIM. Their study found that identification with disability (or disability pride) partially mediated the negative relationship between stigma and self-esteem, providing initial evidence for disability identity as a potential therapeutic target for treating providers. Their research also provided the first evidence of the RIM applied to the disability population. This also was consistent with previous research, which more closely examined specific disabilities and the impact of disability identity. Specifically, Bogart (2015) examined the impact of disability identity as it relates to psychological distress in a sample of adults with MS. In this study, it was found that stronger disability identity among participants was a unique predictor of lower psychological distress, specifically anxiety and depressive symptoms. While both of these findings are a positive first step in better understanding the impact of group identification for PWDs, there are still many unknowns to understanding the real impact of disability identity. For example, one gap that remains at this point is a lack of understanding of different factors which may influence or contribute to the development of disability identity.

A comprehensive literature review that focused on disability identity development shed further light on the topic and acknowledged the extensive gaps which are present in the small literature base that exists (Forber-Pratt et al., 2017). Most notably, there are no examinations of therapeutic interventions that attempt to facilitate the development of a disability identity in the literature, despite numerous implications having been made about its protective effects (Forber-Pratt et al., 2017). Much of this possibly is due to the difficulty in agreeing on a centralized model of disability identity development due to the complexities of disability as an identity, which can occur at different times across the lifespan (Forber-Pratt et al., 2017). Further, their review highlighted that, as is the case with many research topics, samples examining disability identity are predominantly white and often include only binary gender variables. Thus, despite many conversations about disability identity and its hypothesized impacts, the research base is still severely lacking in both quantity and coverage.

Quality of Life

Of the published research that has examined the impact of disability identity for people with disabilities, studies often examine variables that focus on different pathologies such as anxiety or depression, or instead specifically explore a narrower indicator such as self-esteem (Bishop, 2005; Bogart, 2015; Bogart et al., 2018). However, in doing so, such research often limits itself inadvertently in looking at the way that one’s disability has negatively impacted the individual, such as in terms of increased depressive symptoms. However, the use of non-pathologically-oriented variables may provide a more accurate representation of PWD’s psychosocial well-being or overall mental health. In rehabilitation psychology research, quality of life is often assessed as an outcome or indicator variable regarding one’s psychosocial adaptation to disability (Bishop, 2005). In that context, researchers are intending to better understand how PWDs may cope with the onset of a chronic illness or disability (CID). However, several indications make quality of life a more robust outcome variable when more broadly examining psychosocial health, not just in the context of rehabilitation efforts for PWDs.

Quality of life (QOL) historically has been a variable that is difficult to define, with many authors describing it as a "vague" or an "umbrella" term (Bishop, 2005). QOL generally can be understood as a multidimensional variable that incorporates both universal and cultural components at both objective and subjective levels of evaluation of an individual's current life circumstances (Bishop, 2005; Cummins, 2005). One definition of QOL posits that, "QOL is primarily a subjective sense of well-being encompassing physical, psychological, social, and spiritual dimensions" (Haas, 1999, p. 738). As one can observe, QOL as a variable is, in and of itself, broad in nature and better than many other variables in that it serves to encompass more components of life.

While research on specific psychological pathologies is helpful to further understanding of these conditions and treatments among different populations, many of the measurement tools used may artificially inflate the scores of PWDs. Many measures of psychological symptomatology have items related to physical symptoms commonly associated with these conditions and examine behavioral anchors, which may include limited physical activity. However, for individuals with specific disabilities, these items may be elevated simply due to the presence of a disability that imposes different restrictions on physical activities or that cause pain or other adverse symptoms (Olkin, 2017; Olkin & Pledger, 2003). Therefore, these indicators often require additional interpretation of the results in the context of the nature of the individual's condition. In contrast, QOL measures may provide the ability for the rater to weight the specific domains of the highest importance to the individual, allowing the researcher to better understand what areas are contributing positively to one’s life and which may be distressing. For this reason, QOL was assessed in this study in order to better understand the potential impact of disability identity.

One point that is important to note is that based on the extent of the literature the relationship between disability and QOL is complicated. This is due in part to different definitions of QOL, which are based either on objective or subjective experiences. For example, measures that capture objective indicators of QOL often show that PWDs have lower overall

QOL scores than those without disabilities (Bishop et al., 2009; Dijkers, 1997). This perhaps is due to the fact that these measures often measure proxy variables which may include things such as level of education, vocation, social connectivity, and physical functioning (Bishop et al., 2009). As previously mentioned though, many of these components may be substantially limited based on systemic barriers resulting from stigma towards disability (Colella & Bruyère, 2011; Macias et al., 2001; Olkin, 2002). Conversely, research that has explored QOL more subjectively has demonstrated that PWDs do not necessarily report lower levels of QOL than do others (Bishop et al., 2009). These studies note that despite changes in disability or health limitations, many PWDs report a stable or high level of subjective QOL (Bishop, 2005; Bishop et al., 2009; Schwartz & Sprangers, 2000). However, despite this nuance, there are two general points of agreement among disability scholars. This is that "traditional clinical measures of psychiatric and negative affect may not provide a complete picture of clients' mental status [and] progress in psychotherapy," (Bishop et al., 2009, p. 527), and that further non-pathology-oriented measures of QOL should be used more frequently to supplement or to replace clinical outcome measures (Frisch et al., 1992).

Conclusion

The experience of people with disabilities often is wrought with experiences of stigma and discrimination (Hogan, 2019; Olkin, 2002; Smart & Smart, 2006). Systemically, PWDs have been marginalized and othered throughout history, and, until relatively recently they were not afforded many of the same legal protections as have been afforded to other marginalized groups of people (Americans With Disabilities Act, 1990). Unfortunately, the perception of disability as an innate flaw and as an aspect of human diversity that is inherently negative has had a deleterious effect on the psychosocial well-being of PWDs (Emerson & Hatton, 2007). Many have argued that the systematic marginalization and discrimination that is experienced by PWDs ultimately has a more negative impact on their overall QOL than do the functional limitations imposed by the disability itself (Daley et al., 2018).

Further, the systemic position of disability in society has contributed to a lack of emphasis on disability in clinical training and research for psychologists (Bluestone et al., 1996; Foley-Nicpon & Lee, 2012; Kemp & Mallinckrodt, 1996; Lee et al., 2013; Olkin, 2017; Olkin & Pledger, 2003; Woo et al., 2016). Many psychologists and other mental health professionals never receive any formal training to work with PWDs, or on the many psychosocial aspects associated with disability issues. Consequently, they are immensely underprepared to work with PWDs in treatment (Kemp & Mallinckrodt, 1996; Olkin, 2008, 2017). Subsequently, research has demonstrated that clinicians who have not had disability-specific training are more likely to conceptualize and treat disability-related cases in a way that represents an overall negative bias towards PWDs. They also report high anxiety when working with PWDs as clients (Kemp & Mallinckrodt, 1996; Thomas et al., 2011).

Further research has indicated that disability is becoming an increasingly prevalent experience in our society, and psychologists are increasingly likely to work with PWDs as clients in their clinical work (Okoro et al., 2018; Olkin, 2002). Consequently, it is vital that counseling psychologists become increasingly able to articulate and understand the psychosocial aspects of disability and how the presence of a disability potentially may shift treatment considerations and therapeutic interventions for their clients. Further, it is imperative that counseling psychologists are more able to understand the impact of developing or holding a sense of disability identity, and how this may impact clinical outcomes for PWDs such as QOL and psychological distress.

A greater understanding of the role of disability identity is needed in counseling psychology in order to establish a more thorough evidence base for treatment providers as they work with PWDs in their practice. Despite numerous calls to include disability in conversations of individual diversity, in clinical research, and in clinical training, the presence of disability and disability related issues still remains sparse (Kemp & Mallinckrodt, 1996; Olkin, 2008, 2017; Olkin & Pledger, 2003). This extensive gap perpetuates the notion that counseling psychologists, among other mental health practitioners, do not need to be well-versed in working with PWDs, which only contributes further to the overall marginalization of PWDs. Consequently, it is imperative for counseling psychologists to address this gap and to work to include disability in conversations of diversity in order to provide culturally informed and evidence-based care for their clients (APA, 2017).

Chapter Summary

This chapter presented the historical context of how disability has been perceived in our society. Specifically, it examined multiple models that conceptualize disability and provided a rationale for the importance of using the social model of disability in the present study. Next this chapter explained disability as an aspect of human diversity and covered the clinical relevance of acknowledging disability in mental health treatment of PWDs. This chapter specifically explored the current status of the literature base that covers PWDs in mental health treatment and provided several considerations for mental health providers based on research findings. This chapter then expanded on acknowledging disability as an aspect of individual diversity or identity through a thorough discussion of SIT. Specifically, this chapter explored the potential of the RIM to provide helpful context in better understanding the experience of PWDs and providing a potential intervention target for mental health treatment. Next, the chapter examined the current literature which examines disability identity and the large gaps which still exist in the literature base. Finally, this chapter closed with a rationale for using QOL as an outcome variable for PWDs, and specifically as an outcome variable in the present work. In chapter III, an explanation of research methodology including participants, procedures, instrumentation, data analysis, research questions, and hypotheses is provided.

CHAPTER III

METHODOLOGY

This chapter discusses the research methods for this study. This study investigated the relationship between the presence of disability identity and its relationships with quality of life and psychological distress in a sample of adults with disabilities. In order to examine this study's research questions, a non-experimental cross-sectional survey research design with convenience sampling was utilized. In this chapter, first information about the participant sample is described. Next, the procedures of participant recruitment and survey distribution are explained. This is followed by a description of measures used throughout the data collection process. Then an explanation of this study's research questions, and associated hypotheses is provided. Finally, this chapter concludes with a discussion of data analysis procedures used to complete this study.

Participants

The target sample for this study included adults who self-identified as having a diagnosed disability. Regarding inclusion criteria, participants had to be (a) at least 18 years of age, and (b) self-report a diagnosis of disability which they have held for a period of greater than six months.

Participants were recruited through convenience sampling from a regional federally funded training and technical assistance center for people with disabilities (PWDs) living in the Rocky Mountain region. The Rocky Mountain ADA Center was selected due to its wide-reaching advocacy for, and ability to contact, a large number of individuals in the Rocky Mountain region with varying identities according to disability type, ethnicity, sexual orientation, gender, and socioeconomic status in order to better recruit a more diverse and representative sample. It was the intention of this researcher to gain participation from PWDs who hold a wide range of disability diagnoses so that differences and similarities between diagnoses and experiences with disability could be explored for. It is also important to acknowledge that recruiting through an organization such as the Rocky Mountain ADA Center, may skew the sample obtained towards more affluent individuals such as those who have their own home, have internet access, or those who are currently employed or have access to higher education.

The minimum necessary sample size for this study was determined using an a priori power analysis with G* Power 3 statistical software (Faul et al., 2009). In keeping with the standards outlined by Cohen (1988), this power analysis was based on pre-determined levels of significance, power, and effect size. Cohen's recommendations include obtaining a minimum power level of ß = .80 (1992). Doing so would indicate there to be a maximum of a 20% chance of committing a Type II error, a failure to reject the null hypothesis when the null hypothesis is in fact not true. Further, per additional recommendations outlined by Cohen (1992), a medium effect size of $f^2 = .15$ was used to compute the power analysis. Finally, per behavioral research guidelines, a standard α level of .05 was utilized (Tabachnick & Fidell, 2007). Provided with these pre-determined levels and with 11 predictor variables in the study, G*Power 3 estimated that a minimum sample size of 178 PWDs was needed to detect the desired effect. Provided that estimates of emailed survey response rates are approximately 20%, the primary researcher intended to distribute the survey to a minimum of 900 potential participants (Kaplowitz et al., 2004).

Procedures

Prior to participant recruitment and data collection, approval was sought from the University of Northern Colorado Institutional Review Board (IRB; See Appendix A). Following notification of IRB approval, an email (Appendix B) was sent to the Deputy Director of the Rocky Mountain ADA Center, which briefly described the study, the expected benefits for PWDs, and requested assistance in disseminating survey materials. The Rocky Mountain ADA Center then distributed a brief description of the survey and the survey link to potential participants through their list serve and center newsletter. All data for the present study were collected online using Qualtrics, an online service that allows users to collect research data through online surveys. The informed consent document (Appendix C) and study measures were uploaded and formatted to be completed in Qualtrics. Survey materials were then reviewed for accessibility with assistive technology platforms including screen readers. At this stage special care was taken to ensure accessibility of survey materials as all items were provided with enlarged text, clear contrast, and were conformed to accessible question formats per guidance from Qualtrics survey accessibility tool. When prospective participants opened the hyperlink in the email, they were brought to the Qualtrics survey, which began with the informed consent document.

The informed consent document provided a brief summary of the current study and explained the potential risks and benefits to participants. It described that mild discomfort may occur due to information explored by the survey instruments such as the functional impact of disability and experiences with stigma and discrimination and that participants were welcome and able to discontinue their participation at any time without penalty or repercussions. This document also contained contact information for the primary researcher, his Research Advisor, and the University of Northern Colorado's Institutional Review Board. All participants were informed that their completion of the survey would qualify them to enter a drawing for one of four Amazon gift cards worth $25 each if they desired. In order to indicate their consent and to begin the study, participants were able to choose an option that stated, "I consent to participate in this study. I understand that I can choose to discontinue my participation at any time." If any prospective participants decided they did not want to participate in this study, they were able to choose another option that stated, "I choose not to participate in this study at this time." After selecting this option, potential participants were directed to a debriefing page which thanked them for their time in considering participating in this study.

Those who agreed to participate in this study next were asked to provide their age and a current diagnosis of disability. Participants who did not meet inclusion criteria based on their responses to these items were redirected to a page thanking them for their time and participation in this study. Participants who did meet these inclusion criteria were directed first to the *Personal Identity Scale* (Appendix D; Hahn & Belt, 2004). This measure was administered first so that participant responses to this scale were not influenced by the content of other survey items. The remaining questionnaires were administered in random order in order to reduce order effects in participant responses. Participants then ended the study by completing a brief demographic questionnaire (Appendix J).

Upon completion of the survey, participants were then directed to a short debriefing statement (Appendix I), which reiterated the purpose of the study and thanked them for their time. Further, this page contained a link which redirected participants to a separate page for them to fill out a brief contact information card in order to enter the drawing for one of four $25

Amazon gift cards. Participants were ensured that their email addresses would be stored in a separate data set and could not be connected back to their survey responses.

All data from the survey responses were stored on the Qualtrics secure server. Following the completion of data collection, data were downloaded and imported into IBM Statistical Product and Service Solutions (SPSS) Version 25 (IBM Corp, 2017) on the researcher's computer. Both the researcher's computer and files associated with the data analysis were encrypted with password protection. Only the primary researcher and the Research Advisor had access to the data files.

Instrumentation

Participants in this study completed four specific measures and a demographics questionnaire which included items specifically related to one's disability. These four measures were (a) the *Personal Identity Scale* (Hahn & Belt, 2004), (b) *Quality of Life Scale* (Burckhardt et al., 2003), (c) the *Stigma Scale for Chronic Illness* (Molina et al., 2013), and (d) the *Kessler Psychological Distress Scale* (Kessler et al., 2002).

Personal Identity Scale

The Personal Identity Scale (PIS; Hahn & Belt, 2004) is a measure of disability identity and attempts to assess the degree to which one has incorporated their disability status into their identity. Example items from this measure are, "In general I am glad to be a person with a disability," and "I regret that I am a person with a disability." The PIS consists of eight Likert-type items that have five response options ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). All items are summed after the reverse coding of applicable items. Total scores on this measure range from 8 to 40 with higher total scores representing a greater sense of disability identity.

Acceptable reliability for the PIS has been found among a sample of individuals with physical disabilities with Cronbach's α of .74 (Bogart, 2014). A similar internal consistency estimate was found among a sample of individuals with Retinitis Pigmentosa, a progressive eye condition that causes vision loss (α = .64 to .75; Zapata, 2018). Additionally, evidence of content validity for the PIS has been demonstrated. Previous research has shown that higher scores on the PIS are correlated with a decreasing desire for a disability cure among a sample of individuals with mobility disabilities (Hahn & Belt, 2004). In other words, individuals who scored higher on the PIS were less likely to be focused on a cure and consequently appeared to have incorporated their disabilities as components of their personal identities.

Quality of Life Scale

Quality of life (QOL) in this study was broadly defined as one's overall perceived satisfaction with life. This was measured by The Quality of Life Scale (QOLS; Appendix E), developed by Flanagan (1978) and later revised by Burckhardt and colleagues (2003), an independently administered self-report measure of subjective quality of life. The QOLS consists of 16 items which measure across six conceptual domains of quality of life; material and physical well-being, relationships with other people, social, community, and civic activities, personal development and fulfillment, recreation, and independence (Burckhardt et al., 2003). Within each conceptual area, participants are asked to rate their satisfaction with each item on a 7-point Likert type scale ranging from 1 (Terrible) and 7 (Delighted). Specific items list a component of the broader conceptual domains such as "Close friends" or "Work-job or in home." A participant's ratings are summed to produce a total score which can range from 16 to 112, with higher scores representing higher quality of life.

The QOLS has demonstrated appropriate levels of internal consistency among various samples of individuals with chronic illness such as diabetes, osteoarthritis, rheumatoid arthritis, and post-ostomy surgery. These internal consistency estimates range from α = .82 to .92 (Burckhardt et al., 2003). Further, test-retest reliability of the QOLS in chronic illness groups has been well established with coefficients ranging between r = .78 to .84 (Burckhardt et al., 2003). The QOLS has also demonstrated strong convergent validity with measures of life satisfaction (Life Satisfaction Index-Z), as correlation coefficients have ranged from r = .67 to .75 (Burckhardt et al., 2003). Similarly, discriminant validity has been demonstrated with low to moderate correlations with measures of physical health status (Duke-UNC Health Profile), ranging from r = .25 to .48.

Stigma Scale for Chronic Illness

The Stigma Scale for Chronic Illness (SSCI; Appendix F) is an eight-item measure used to capture the experience of stigma for participants related to a chronic illness (Molina et al., 2013). This scale has been adapted for use by replacing the word “illness” in all items with the word “disability,” in previous research conducted by Bogart et al. (2018). This format of the SSCI was used in the present study. Responses to each item of the SSCI are recorded on a five-point Likert scale with options ranging from 1 (Never) to 5 (Always). Responses are summed to provide a total score from 8 to 40, with higher scores indicating a greater amount of disability-related stigma experienced. Sample items from this measure are, “Because of my disability, some people seemed uncomfortable with me,” and, “Because of my disability, some people were unkind to me.” Strong internal consistency has been reported for the original SSCI in numerous samples, including a sample of people diagnosed with various neurological conditions (α = .89; Molina et al., 2013). A similar internal consistency estimate was observed when replacing "illness" with "disability" in the adapted SSCI, in a sample of individuals who have endorsed impairments consistent with the definition of disability according to the International Classification of Functioning, Disability, and Health (ICFDH; $\alpha = .92$; Bogart et al., 2018; WHO, 2001). Further, convergent validity has been demonstrated through biserial correlations with measures of psychological distress (Molina et al., 2013). For the purposes of this study, the SSCI was used as a continuous measure of disability-related stigma experienced by the participants.

Kessler Psychological Distress Scale

The Kessler Psychological Distress Scale (K10; Appendix G) was used as a global measure of psychological distress that one has experienced over the past month (Kessler et al., 2002). The K10 consists of 10 Likert-type items. Responses to its items are provided on a five-item Likert-type scale ranging from 1 (None of the time) to 5 (All of the time). Sample items include "During the last 30 days, about how often did you feel hopeless?" and "During the last 30 days, about how often did you feel nervous?" All item scores on the K10 are summed together to provide a total score of psychological distress. Total scores range from 10 to 50 and higher scores are representative of higher distress experienced. Interpretive guidelines for the K10 indicate that persons who score below 20 are considered "likely to be well," while those who score 20 through 24 are considered to experience psychological distress which may be representative of "a mild mental disorder" (Andrews & Slade, 2001; Kessler et al., 2002). Persons who score 25 through 29 are considered to be experiencing psychological distress which may be typical of having a "moderate mental disorder," and scores 30 or greater are interpreted as high levels of distress characteristic of being "likely to have a severe mental disorder" (Andrews & Slade, 2001; Kessler et al., 2002). For the purposes of this study, the K10 was used as a continuous measure of psychological distress, where higher scores indicated greater levels of psychological distress experienced by the participants in the last 30 days.

An internal consistency estimate of the K10 in a sample of people with disabilities was strong (α = .94; Bogart et al., 2017). This estimate is also consistent with internal consistency estimates from a U.S. national telephone survey of the K10 during scale development, which was representative of the general population (α = .93; Kessler et al., 2002). During development of this measure strong convergent validity was demonstrated through corresponding clinical interviews examining anxiety and depression (Kessler et al., 2002).

Demographics Questionnaire

The demographics questionnaire was developed by this researcher specifically for use in this study (Appendix J). This questionnaire asked participants to report several characteristics about themselves including their age, gender, ethnicity, sexual orientation, level of education, and current employment status. Age was the only demographic variable collected that uses a ratio scale of measurement. Both level of education and current employment status were measured using an ordinal scale of measurement, while gender, ethnicity, and sexual orientation each used nominal or categorical ratings, which do not imply a difference in value between categories. Further, the questionnaire asked for information regarding their experience of disability, including their disability or disabilities, disability category as defined by the United States Census Bureau (2020), age of onset of disability, obviousness of disability, and functional impact of disability. These demographic questions were developed by this researcher, and were assessed using single item, face-valid questions. This process was selected in conjunction with research supporting the use of single item measures to assess homogenous constructs such as demographic questions (Loo, 2002). When providing information about their disability, participants responded in two forms. First, participants were able to supply information about their disability by typing their response into a text box. Second, participants were presented with response options to categorize their disability congruent with categories presented by the U.S. Census Bureau. Participants were then able to select the age at which they first had this disability, and whether the disability is considered congenital or acquired. Further, participants then were asked to complete a 5-point Likert-type response which assessed for obviousness of their disability. Response options ranged from 1 (My disability is not obvious to others) to 5 (My disability is always obvious to others). Finally, the functional impact(s) of one's disability was assessed using a 5-point Likert-type scale. Response options ranged from 1 (My disability significantly impacts almost no areas of my life) to 5 (My disability significantly impacts almost all areas in my life). Obviousness of one's disability and functional impact of one's disability were measured using interval scales. Onset of disability was measured with a binary ordinal response and disability type was a nominal or categorical variable, which did not imply a standard difference between groups.

Sample Characteristics

A total of 1,060 prospective participants clicked on the hyperlink provided in the recruitment letter, taking them to the study's informed consent page. Of these individuals, 75 chose to not consent to the study, and thus were immediately directed to a debriefing page that thanked them for their time. Of the remaining 985 participants who provided their informed consent and then began to answer survey items, 112 of them ultimately were not included in the analyses as they did not respond to at least 95% of survey items, including demographic items. The remaining and final sample consisted of 873 participants, all of whom consented to participate in the study and answered at least 95% of all survey items.

When considering the characteristics of this sample, there appears to be one notable difference in its distribution when compared to the broader population of PWDs. Specifically, the percentage of PWDs in this study who reported themselves to be currently employed in some manner was 67.1%. In comparison, estimates from the U.S. Bureau of Labor Statistics (BLS) articulate that only 19.1% of PWDs are employed in the civilian labor force (2022), with an additional 78.7% of the population not in the labor force due to multiple factors such as student status, retirement, or unemployment. Thus, the sample obtained for this study may over-represent the views of PWDs who are currently employed in comparison to the views of the actual PWD population.

Further, this sample also appears to represent more traditionally marginalized or minority ethnicities than estimates in the population of PWDs. For example, according to the U.S. Census Bureau (2020), approximately 66.4% of PWDs identify as White, not Hispanic or Latino. However, only 29.9% of participants in this study self-identified in a similar fashion. Similar differences were observed when looking at the proportion of participants in this study which self-identified with other ethnicities and the proportion of PWDs who identified with the same ethnicity in U.S. Census Bureau data (2020). For example, 18.7% of participants in the current study self-identified as Latino/a/x American, Hispanic, or Chicano/a/x; 23.1% self-identified as Native American or Native Hawaiian; and 11.2% self-identified as Asian American, Pacific Islander, or Asian. However, according to the U.S. Census Bureau data (2020), only 13.2%, 1.3%, and 3.2% of PWDs respectively identified with these ethnic groups. For other ethnic groups, the proportion represented in this sample is more comparable to estimates of the proportion in the population provided by census data; 12.8% of participants having self-identified as Black/African American compared to 13.7% in the population of PWDs, and with and 2.9% having self-identified as Biracial or Multiracial in this sample compared to 4.2% in the population of PWDs.

In other ways though, the sample obtained by this study appears to be more closely representative of the broader national population of PWDs. For example, the BLS (2022) estimates 63.4% of PWDs had completed at least some college, an associate’s degree, a bachelor’s degree, or higher. In comparison, educational attainment data for this sample was generally commensurate with this estimate and showed 61.6% of participants reporting having completed at least some college education. A summary of this sample’s demographics is provided in Table 1 below.

Table 1

Participant Demographic Characteristics (n = 873)

Category	*n*	Percentage
Age		
18 to 24	74	8.6
25 to 34	434	50.6
35 to 44	250	29.2
45 to 54	45	5.3
55 to 64	32	3.7
65 to 74	18	2.1
75 to 85	4	0.5
Gender		
Male	589	67.5
Female	257	29.4
Transgender	14	1.6
Gender Queer/Gender Fluid	10	1.1
My gender is not represented on this list	2	0.2
Did not provide an answer	1	0.1
Ethnicity		
African American/Black	112	12.8
Asian American, Pacific Islander, Asian	98	11.2
Caucasian, European American, European	261	29.9
Latino/a/x American, Hispanic, Chicano/a/x	163	18.7
Native American, Native Hawaiian	202	23.1
Biracial/Multiracial	25	2.9
Other	8	0.9
Did not provide an answer	4	0.5
Sexual Orientation		
Straight (heterosexual)	616	70.6
Gay/Lesbian	191	21.9
Bisexual	37	4.2
Asexual	11	1.3
Not Sure/Questioning	5	0.6
My sexual orientation is not represented on this list	5	0.6
I prefer not to answer	5	0.6
Did not provide an answer	3	0.3

Table 1, *continued*

Category	*n*	Percentage
Education		
No high school	46	5.3
Some high school	125	14.3
GED	19	2.2
High school diploma	143	16.4
Some college	256	29.3
Associate's degree	87	10
Bachelor's degree	142	16.3
Graduate or professional degree	52	6.0
Did not provide an answer	3	0.3
Employment		
Employed full time	275	31.5
Employed part time	258	29.6
Self employed	52	6.0
Out of work and currently looking for work	79	9.0
Out of work but not currently looking for work	72	8.2
Homemaker	32	3.7
Student	11	1.3
Military	11	1.3
Retired	15	1.7
Unable to work	64	7.3
Did not provide an answer	4	0.5

Additional demographic characteristics were collected from this sample with respect to their personal experiences of disability, including type of disability, obviousness of their disability, functional impact of their disability, and onset of their disability as either congenital or acquired. Among the current sample, 41% self-identified as having a primary Mobility/Ambulatory difficulty. This is arguably lower than the 47.8% of PWDs who self-identified as having a Mobility/Ambulatory difficulty in the Disability and Health Data System (DHDS; Centers for Disease Control and Prevention, 2022). However, differences observed between the percentage of people with a specific disability type in this sample compared to national estimates likely may be accounted for by differences in data collection methods. In this study, participants were asked to select only their primary difficulty or disability type. By comparison, DHDS data does not limit individuals to one disability type and thus all applicable difficulty or disability types for a person are included, meaning one individual may count in multiple categories. Consequently, prevalence estimates for most disability types are higher in DHDS data than in this sample. For other disability types, the DHDS estimates that 41.3% of all PWDs have a Cognitive difficulty, 25.2% have a Hearing difficulty, 19.9% have a Vision difficulty, 12.7% have a Self-care difficulty, and 25.4% have an Independent living difficulty. By comparison, self-reported rates of primary disability type among this sample were as follows: 9.3% reported having a primary Cognitive difficulty, 17.3% endorsed a primary Hearing difficulty, 11.1% reported a primary Vision difficulty, 12.6% described a primary Self-care difficulty, and only 3.3% stated they had a primary Independent living difficulty. A complete summary of disability demographic characteristics for this sample are provided in Table 2 below.

Table 2

Participant Disability Characteristics (n = 873)

Category	*n*	Percentage
Obviousness of Disability		
Not obvious	94	10.8
Mostly not obvious	156	17.9
Sometimes obvious and sometimes not obvious	205	23.5
Mostly obvious	275	31.5
Always obvious	134	15.3
Did not provide an answer	9	1
Primary Disability Type		
Hearing difficulty: Deaf or having serious difficulty hearing (DEAR)	151	17.3
Vision difficulty: Blind or having serious difficulty seeing even when wearing glasses (DEYE)	97	11.1
Cognitive difficulty: Because of a physical, mental, or emotional problem, having difficulty remembering, concentrating, or making decisions (DREM)	81	9.3
Mobility/Ambulatory difficulty: Having serious difficulty walking or climbing stairs (DPHY)	358	41
Self-care difficulty: Having difficulty bathing or dressing (DDRS)	110	12.6
Independent living difficulty: Because of a physical, mental, or emotional problem, having difficulty doing errands alone such as visiting a doctor's office or shopping (DOUT)	29	3.3
Other	34	3.9
Did not provide an answer	13	1.5
Impact of Disability		
Impacts almost no areas of my life	66	7.6
Impacts a few areas of my life	209	23.9
Impacts some areas of my life	200	22.9
Impacts a lot of areas of my life	271	31.0
Impacts almost all areas of my life	118	13.5
Did not provide an answer	9	1.0
Onset of Disability		
Congenital	260	29.8
Acquired	597	68.4
Did not provide an answer	16	1.8

Data Analysis

Data Cleaning and Preliminary Analyses

Preliminary analyses completed prior to hypothesis testing included (a) a descriptive analysis and (b) a reliability analysis for each measure. It should be noted that for each preliminary analysis and specific analysis used for hypothesis testing, missing data were handled through listwise deletion, which assumes that the data is missing at random and that the sample size is sufficient enough to generate adequate power with limitations to sample size that are caused by missing cases (Pepinsky, 2018). Additionally, assumptions for hypothesis testing analyses were completed prior to analysis. These assumptions are discussed in further detail below.

Assumption Testing

The following assumptions for hierarchical regression were tested prior to hypothesis testing: (a) independence of observations, (b) homoscedasticity, (c) linearity, (d) multicollinearity of independent (predictor) variables, (e) presence of significant outliers, and (f) approximate normal distribution of residuals. First, to test for the assumption of (a) independence of observations, Durbin-Watson statistics were analyzed with results approaching 2, indicating independence of observations. In order to test assumption (b) homoscedasticity, scatterplots of studentized residuals against predicted values. For assumption (c) linearity, partial regression plots between independent variables and the dependent variables individually were completed. To test for assumption (d) multicollinearity of independent variables, an examination of variance of inflation factors (VIF) was completed. VIF scores of 10 or more indicated evidence of multicollinearity and violation of the assumption. Assumption (e), the presence of significant outliers, was investigated through an inspection of studentized residuals. Values exceeding 3 represented significant outliers, which were then removed from the regression analysis (Agresti & Finlay, 2009). Finally, assumption (f) an approximate normal distribution of residuals was evaluated through an inspection of a normal Q-Q plot of studentized residuals for approximate adherence to the diagonal line.

Research Questions, Hypotheses, and Analyses

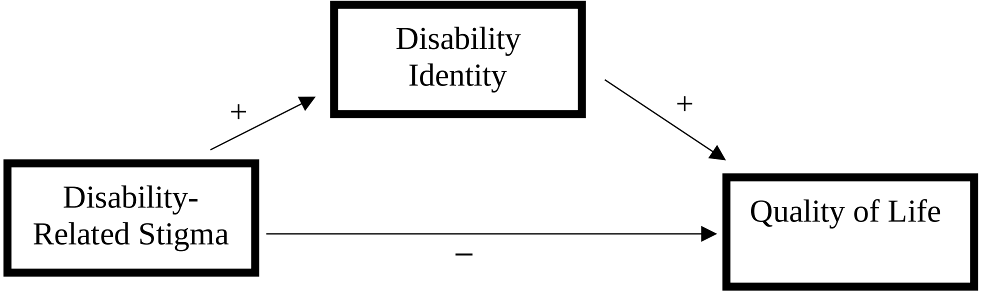
The following research questions and associated hypotheses were developed for analysis in this study:

Q1 How does disability identity predict the effect of disability-related stigma on quality of life experienced by people with disabilities?

H1 According to the results of a hierarchical multiple linear regression, disability identity (as measured by the PIS) will significantly moderate the relationship between disability-related stigma (as measured by the SSCI) and quality of life (as measured by the QOLS) when controlling for specific demographic variables including race, age, sexual orientation, gender identity, socioeconomic status, and level of education (Figure 2). In other words, as disability identity increases it is hypothesized that the negative relationship between disability-related stigma and quality of life will decrease.

Figure 2

Moderation Model of the Relationship Between Disability-Related Stigma and Quality of Life by Disability Identity



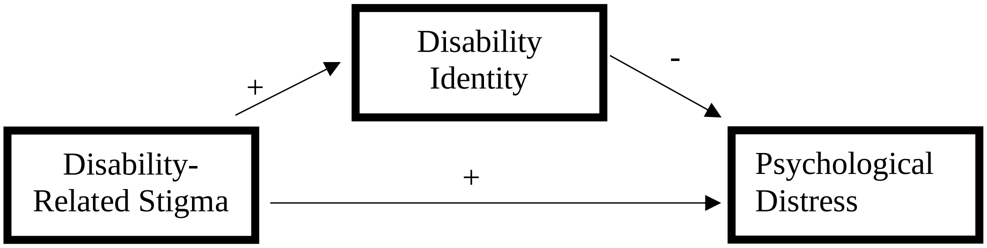
Q2 How does disability identity predict the effect of disability-related stigma on psychological distress experienced by people with disabilities?

H2 Similarly, disability identity (as measured by the PIS) will significantly moderate the relationship between disability-related stigma (as measured by the SSCI) and

> psychological distress (as measured by the K10) when controlling for specific demographic variables including race, age, sexual orientation, gender identity, socioeconomic status, and level of education (Figure 3). In other words, as disability identity increases it is hypothesized that the positive relationship between disability-related stigma and psychological distress will decrease.

Figure 3

Moderation model of the Relationship Between Disability-Related Stigma and Psychological Distress by Disability Identity



When testing Hypothesis 1 and 2, a hierarchical multiple regression analysis with a total of nine control variables and two predictor variables were used. Race, age, sexual orientation, gender, socioeconomic status, level of education, onset of disability, obviousness of disability, and functional ability were held as constant or control variables in the first step. In Step 2, disability-related stigma was added, followed by disability identity in the 3rd step. In Step 4, disability-related stigma x disability identity was entered as the variable of interest. These variables were regressed onto quality of life as the outcome variable. This procedure was then repeated with the steps of the regression remaining the same, however all variables were regressed onto psychological distress.

Q3 How does one's disability experience, including onset, obviousness, and functional impact of one's disability account for variance in one's disability identity?

H3 According to the results of a multiple linear regression, onset of disability, obviousness of disability, and functional impact, measured by single item demographic questions, will be significant predictors of the amount of disability identity independently, when controlling for specific demographic variables including race, age, sexual orientation, gender identity, socioeconomic status, and level of education.

To test Hypothesis 3, a hierarchical multiple linear regression was conducted. All variables were regressed onto the outcome variable, Disability Identity, as measured by the PIS. In the first block control variables of race, age, sexual orientation, gender identity, socioeconomic status, and level of education were added. Onset of disability, obviousness of disability, and functional ability, all measured by single demographic items, were then added in the second block.

Q4 Does one's intersectional identities (e.g. race, age, sexual orientation, gender identity, socioeconomic status, & level of education) predict their disability identity?

Currently, there is minimal scholarship that investigates the potential impact of the diversity of one's intersectional identities on disability identity. Consequently, the nature of this research question is exploratory and therefore no formal hypotheses were developed. To assess research question 4, an exploratory multiple linear regression was completed. Demographic variables including race, age, sexual orientation, gender identity, socioeconomic status, level of education were regressed onto the outcome variable disability identity.

Due to the fact that significance testing for multiple analyses was performed, a Bonferroni adjustment was used to reduce the probability of committing a type I error ($\alpha = .05/4 = .0125$).

Chapter Summary

This chapter described and explained the methodology of this study. The purpose of this study was to better understand the relationship between disability identity, disability-related stigma, quality of life and psychological distress among a sample of adults with disabilities. This was done in an effort to better support psychologists and other mental health practitioners in designing informed treatment plans for their clients with disabilities. Participants in this study were recruited through a regional advocacy center for PWDs, who completed a series of online measures that examined disability identity, quality of life, stigma, psychological distress, and demographics. Disability identity was measured with the PIS (Hahn & Belt, 2004), and Stigma was measured using the SSCI (Molina et al., 2013). Further, Quality of Life was measured using the QOLS (Burckhardt et al., 2003) and Psychological Distress was measured using the K10 (Kessler et al., 2002).

This study hypothesized that higher levels of disability identity (as measured by the PIS; Hahn & Belt, 2004) would significantly predict greater quality of life (as measured by the QOLS; Burckhardt et al., 2003) for PWDs. Further, it was hypothesized that one's level of disability identity would significantly and indirectly predict one's psychological distress. The predictive nature of disability identity to quality of life and psychological distress was hypothesized to be significantly above and beyond the established predictive effect of self-esteem, thus providing evidence that disability identity is an independent construct and a potential intervention target for psychologists and other mental health practitioners when working with PWDs in therapy. It was subsequently hypothesized that certain characteristics of an individual's specific disability would account for variance in the development of one's disability identity. Specifically, it was predicted that that lower age of onset, higher obviousness, and lower levels of functional ability would be associated with higher disability identity due to the salience of these characteristics in daily life activities. Finally, an exploratory multiple linear regression was completed to explore the potential impact of one's intersectional identities on the presence of one's disability identity. Results for each of these hypotheses are discussed in detail in Chapter IV. Demographic information about participant characteristics and descriptive analyses for each measure also are provided.

CHAPTER IV

DATA ANALYSIS AND RESULTS

This chapter outlines the results of this study. The first section reviews the purpose of this study and is followed by a section which reports the reliabilities of the sample for each measure used in this study and provides comparisons to reliability estimates from previous studies. This section is followed by a review of the obtained descriptive statistics for each measure. This chapter then concludes with results specific to the hypotheses that were derived from this study's research questions.

Review of Purpose

The present study had two main purposes. The first purpose of this study was to examine disability identity and investigate how it may moderate the effect of disability-related stigma on both quality of life and psychological distress among people with disabilities (PWDs). For this purpose, this study specifically explored the relationships between disability identity, disability-related stigma, and indicators of overall well-being among PWDs, which included one's quality of life and level of psychological distress. The second purpose of this study was to further the field of health-service psychology's understanding of unique factors which may contribute to the degree one experiences disability identity in their own life. To do this, this study examined various aspects specific to one's life experience such as personal identity factors (i.e., age, race, gender, sexual orientation, level of education, and current employment status) and factors specific to one's disability (i.e., type of onset, functional impact of one's disability, and obviousness of one's disability) that may influence how disability identity presents in one's life. To fulfill these purposes, participants completed several measures which aimed to capture data central to investigating the research questions of this study. Reliability estimates for this sample are reviewed for each measure in the next section.

Reliability Analyses for the Measures

Personal Identity Scale (PIS)

For the purpose of this study, the PIS (Hahn & Belt, 2004) was used to operationalize disability identity. In the present sample, the PIS was found to have an internal consistency of Cronbach's $\alpha = 0.56$. This is notably lower than previous studies that used the PIS in a similar fashion. For example, in one study which examined the role of disability self-concept in adaptation to disability, a Cronbach's α of .74 was found within a sample of individuals with physical disabilities (Bogart, 2014). Further, in a study which specifically examined the reliability and structural validity of scores on the PIS in a sample of individuals diagnosed with Retinitis Pigmentosa, a progressive eye condition that causes vision loss, a similar internal consistency estimate was found ($\alpha = .64$ to .75; Zapata, 2018). Although the estimate of internal consistency found here is substantially lower than in those previous studies, it is possible that this is due to the variability in types of disability reported and the nuance within disability identity among the participants in this study. In other words, one key difference in this sample when compared to previous uses of the PIS, is that this sample includes multiple disability types rather than a specific subset or diagnosis. Thus, it is possible that differences between diagnoses when compared to the unitary definitions of disability used in previous studies contributed to the lower internal consistency observed in this study. However, if this were true it would seem to indicate that the PIS does not measure disability identity as a unitary construct.

As previously noted, there currently exists a notable absence in alternative measures to examine disability identity. Although the PIS has been the most used for this purpose, its development occurred nearly 20 years ago as the construct of disability identity was only just emerging. Since then, only very few published studies have examined this construct any further to date. Thus, our current understanding of DI as a construct (a) may lack adequate definition as is composed, and (b) may be substantially outdated anyway. Consequently, even if the PIS initially was effective enough for encapsulating previous definitions or understandings of DI, it may not have been flexible enough still to adapt along with the construct in its growth over time. However, the PIS was still deemed appropriate for use in further analyses in this study, relying on its previous evidence of content validity (Hahn & Belt, 2004) and the field's lack of alternatively available measures for this construct. Primarily, previous research has shown that higher scores on the PIS are significantly correlated with a decreasing desire for a disability cure among individuals with mobility disabilities (Hahn & Belt, 2004). In other words, as individuals scored higher on the PIS, they were less likely to be focused on a cure for their disability and consequently appeared to have increasingly incorporated their disabilities as salient components of their personal identities.

Quality of Life Scale (QOLS)

In this study, the QOLS (Burckhardt et al., 2003) was used to operationalize a person's perspective on their quality of life. The QOLS was found to have a high degree of internal consistency, with Cronbach's $\alpha = .96$. This level of internal consistency exceeds estimates provided by the previous validation study where appropriate levels of internal consistency had been found among various samples of individuals with chronic illness such as diabetes, osteoarthritis, rheumatoid arthritis, and post-ostomy surgery (Burckhardt et al., 2003). In that previous study internal consistency estimates ranged from Cronbach's α = .82 to .92 for different disability diagnoses.

Stigma Scale for Chronic Illness (SSCI)

For this study, the SSCI (Molina et al., 2013) was used to operationalize stigma related to one's disability. The SSCI was found to have a high degree of internal consistency with Cronbach's α = .90. This result is consistent with previous studies that reported similar strong levels of internal consistency. For example, high internal consistency was found for the SSCI in numerous samples, including those diagnosed with various neurological conditions (Cronbach's α = .89; Molina et al., 2013). A similar internal consistency estimate was observed when replacing the term "illness" with "disability" in the adapted SSCI (which was used in this study) among those who endorsed impairments consistent with the definition of disability according to the International Classification of Functioning, Disability, and Health (ICFDH; Cronbach's α = .92; Bogart et al., 2018; WHO, 2001).

Kessler Psychological Distress Scale (K10)

In this study, the K10 (Kessler et al., 2002) was found to have a strong level of internal consistency with Cronbach's α = .91. This is similar to internal consistency found in a study of disability pride where the K10 was previously found to have strong internal consistency in a sample of adults with disabilities (Cronbach's α = .94; Bogart et al., 2017). This estimate was also consistent with internal consistency estimates from a national telephone survey of the K10 during its scale development, whose sample was representative of the general U.S. population (Cronbach's α = .93; Kessler et al., 2002).

Descriptive Statistics for the Measures

Personal Identity Scale (PIS)

Descriptive statistics for the PIS (*n* = 836) are presented in Table 3 below.

Table 3

Descriptive Statistics for the Personal Identity Scale (PIS; n = 836)

M	*SD*	Possible Range	Reported Range	Skewness	Kurtosis
21.82	4.33	8 to 40	12 to 40	0.65	1.73

Among all 873 participants who consented to the study, only 836 responded to all items on the PIS and thus were eligible to be included in this analysis. The remaining 37 participants (4.24%) who did not complete all items on the PIS were removed using listwise deletion and not included in this analysis. Participants' responses on the PIS provided a mean score of 21.82, which is appropriately near the middle of its possible range of scores. The data were slightly positively skewed ($\gamma = 0.65$), indicating that a higher proportion of responses were on the lower end of possible scores, a result that represents overall lower levels of disability identity among the given sample. The kurtosis for this sample on the PIS was slightly platykurtic, meaning that a significant proportion of the data fell away from the mean ($\kappa = 1.73$). In other words, the distribution of data for the PIS was spread across the range of scores in a way that did not result in a significant density of scores surrounding the mean.

Quality of Life Scale (QOLS)

Descriptive statistics for the QOLS (*n* = 778) are presented in Table 4 below.

Table 4

Descriptive Statistics for the Quality of Life Scale (QOLS; n = 778)

M	*SD*	Possible Range	Reported Range	Skewness	Kurtosis
75.04	19.05	16 to 112	16 to 112	-0.32	-0.02

Among all 873 participants who consented to the study, only 778 responded to all items on the QOLS and thus were eligible to be included in this analysis. The remaining 95 participants (10.88%) who did not respond to all items on the QOLS were removed using listwise deletion and not included in this analysis. Participants' responses on the QOLS had a mean score of 75.04, which was appropriately near the middle of its possible range of scores. Its data were approximately normal in skew (γ = -0.32), indicating that there was an approximately equal proportion of responses on the higher and lower end of the possible range of scores. Kurtosis for this sample on the QOLS was platykurtic (κ = -0.02), meaning that the deviation in the data did not provide a well-defined peak; thus, outliers to the data were less likely.

Stigma Scale for Chronic Illness (SSCI)

Descriptive statistics for the SSCI (*n* = 827) are presented in Table 5 below.

Table 5

Descriptive Statistics for the Stigma Scale for Chronic Illness (SSCI; n = 827)

M	*SD*	Possible Range	Reported Range	Skewness	Kurtosis
22.72	6.5	8 to 40	8 to 40	0.33	0.29

Among all 873 participants who consented to the study, only 827 responded to all items on the SSCI and thus were eligible to be included in this analysis. The remaining 46 participants (5.73%) who did not respond to all items on the SSCI were removed using listwise deletion and not included in this analysis. Participants' responses on the SSCI provided a mean score of 22.72, which was appropriately near the middle of possible range of scores. Its data were approximately normal in skew ($\gamma = 0.33$), indicating that there was an approximately equal proportion of responses on both the higher and lower ends of its possible range of scores. Its kurtosis for this sample was platykurtic ($\kappa = 0.29$), meaning the deviation in the data did not provide a well-defined peak; thus, outliers to the data were less likely.

Kessler Psychological Distress Scale (K10)

Descriptive statistics for the K10 (*n* = 807) are presented in Table 6 below.

Table 6

Descriptive Statistics for the Kessler Psychological Distress Scale (K10; n = 807)

M	*SD*	Possible Range	Reported Range	Skewness	Kurtosis
27.13	7.25	10 to 50	10 to 47	-0.03	-0.32

Among all 873 participants who consented to the study, only 807 responded to all items on the K10 and thus were eligible to be included in this analysis. The remaining 66 participants (7.56%) did not respond to all items on the K10; they were removed using listwise deletion and not included in this analysis. Participants' responses on the K10 had a mean score of 27.13, which is slightly below the median of its possible range of scores. Its data were approximately normal in skew ($\gamma = -0.03$), indicating that there was an approximately equal proportion of responses on both the higher and lower ends of its possible range of scores. Its kurtosis for this sample was platykurtic ($\kappa = -0.32$), meaning the deviation in the data did not provide a well-defined peak; and thus, outliers to the data were less likely.

Statistical Analyses for the Hypotheses

Preparation for the Data Analyses

All statistical analyses were completed using IBM Statistical Product and Service Solutions (SPSS) Version 25 (IBM Corp., 2017) and were conducted using a Type 1 error rate of $\alpha = 0.05$. The assumptions of regression were tested prior to performing any data analysis. All assumptions, specifically (a) independence of observations, (b) homoscedasticity, (c) linearity, (d) multicollinearity of independent (predictor) variables, (e) presence of significant outliers, and (f) approximate normal distribution of residuals were met.

Statistical Analyses of the Hypotheses

Correlational Analysis

Prior to hypothesis testing for the specific research questions, a correlational analysis for all variables included in this study's analyses was conducted to determine if significant correlations existed between the variables. Several significant correlations were observed and are summarized in Table 7 below.

Table 7

Correlational Analysis for Hypothesis Testing (n = 793)

	PIS x SSCI	PIS	SSCI	K10	QOLS	Obviousness	Functional Impact	Congenital vs. Acquired	Education	Employment Status	*Sexual Orientation*	*Ethnicity*	Age	*Gender Identity*
PIS x SSCI	-													
PIS	.363**	-												
SSCI	.705**	-.374**	-											
K10	.399**	-.350**	.658**	-										
QOLS	-.287**	.227**	-.453**	-.544**	-									
Obviousness	0.042	-.205**	.205**	.221**	-.163**	-								
Functional Impact	.130**	-.118**	.206**	.173**	-.146**	.473**	-							
Congenital vs. Acquired	-0.002	-.162**	.139**	.103**	-0.058	.207**	0.029	-						
Education	.145**	.125**	.080*	0.004	-0.022	-.085*	.073*	.116**	-					
Employment Status	-0.069	.120**	-.136**	-.119**	-0.033	.112**	.170**	-.102**	-.137**	-				
Sexual Orientation	0.059	0.060	-0.004	-.079*	0.047	-.089**	-0.028	-.093**	0.058	-0.031	-			
Ethnicity	0.022	-0.046	0.066	.077*	0.031	.116**	0.043	.131**	0.034	.101**	-0.027	-		
Age	.129**	.077*	.087*	-0.017	-0.045	0.060	.243**	0.041	.112**	.145**	-.073*	0.001	-	
Gender Identity	.114**	.162**	-0.019	-0.051	-0.070	-.086*	0.001	-0.048	.113**	-0.043	.388**	-0.033	-0.035	-

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

PIS x SSCI = Interaction coefficient between PIS and SSCI
PIS = Personal Identity Scale (Total score)
SSCI = Stigma Scale for Chronic Illness (Total score)
K10 = Kessler Psychological Distress Scale (Total score)
QOLS = Quality of Life Scale (Total score)
Italicized variables were nominally coded. Thus, correlation statistics do not imply meaningful directionality of group differences.

Question 1

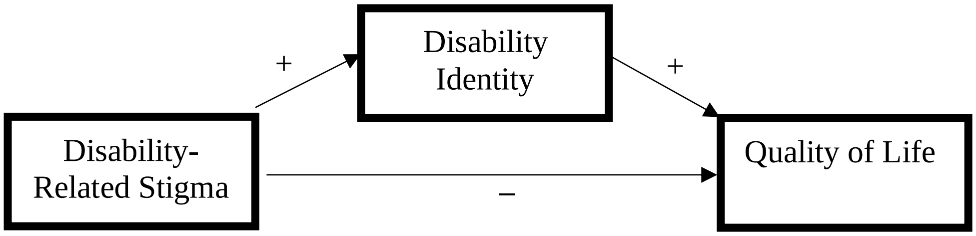
This study's first research question asked the following:

Q1 How does disability identity predict the effect of disability-related stigma on quality of life experienced by people with disabilities?

Among the current sample, 701 participants answered all items relevant to this question and thus were eligible to be included in this analysis. For this research question, it was hypothesized that the results of a hierarchical multiple linear regression would show that disability identity, as measured by the PIS, would significantly moderate the relationship between disability-related stigma, as measured by the SSCI, and quality of life, as measured by the QOLS, when controlling for the specific demographic variables of race, age, sexual orientation, gender identity, socioeconomic status, and level of education in accordance with the rejection identification model (Branscombe et al., 1999). The hypothesized moderation effect is shown in Figure 4 below.

Figure 4

Hypothesized Moderation Effect of Disability Identity Between Disability-Related Stigma and Quality of Life



A hierarchical regression analysis was conducted to test the hypothesis. In this analysis, quality of life served as the dependent variable and was operationalized by the QOLS total score. The control variables of age, ethnicity, gender identity, sexual orientation, education level, and employment status each were entered in the first block. In the second block, disability related stigma as operationalized by the SSCI total score, and disability identity, as operationalized by the PIS total score, each were entered. Next, the primary independent variable of interest, the interaction between disability stigma and disability identity was created by computing the product of these two variables, which then was entered in the third and final block. Results of this regression analysis are listed below in Table 8.

Table 8

Regression Analysis for Question 1 (n = 701)

	Variable	r^2	Adj r^2	B	*SE* B	β	*t*	*p*
Block 1	Model	0.018	0.010					
	(Constant)			80.201	3.75		21.387	< .001***
	Level of Education			-0.159	0.380	-0.016	-0.417	0.676
	Employment Status			-0.204	0.275	-0.029	-0.741	0.459
	Sexual Orientation			1.221	0.664	0.075	1.839	0.066
	Ethnicity			0.588	0.509	0.044	1.154	0.249
	Age			-0.049	0.072	-0.027	-0.679	0.497
	Gender Identity			-3.821	1.263	-0.124	-3.025	0.003**
Block 2	Model	0.244	0.235					
	(Constant)			76.299	3.39	-	22.508	< .001***
	Level of Education			-0.017	0.338	-0.002	-0.050	0.960
	Employment Status			-0.835	0.246	-0.119	-3.390	0.001**
	Sexual Orientation			1.127	0.583	0.070	1.932	0.054
	Ethnicity			1.029	0.449	0.077	2.292	0.022*
	Age			0.060	0.064	0.032	0.927	0.354
	Gender Identity			-3.822	1.118	-0.125	-3.419	0.001**
	Disability Identity			0.287	0.164	0.064	1.749	0.081
	Disability Stigma			-1.357	0.108	-0.460	-12.608	< .001***
Block 3	Model	0.251	0.241					
	(Constant)			75.605	3.387	-	22.322	< .001***
	Level of Education			0.083	0.339	0.008	0.244	0.807
	Employment Status			-0.821	0.245	-0.117	-3.347	0.001**
	Sexual Orientation			0.972	0.584	0.060	1.664	0.097
	Ethnicity			1.153	0.450	0.086	2.565	0.011*
	Age			0.080	0.065	0.043	1.240	0.215
	Gender Identity			-3.391	1.114	-0.128	-3.527	< .001***
	Disability Identity			0.258	0.164	0.058	1.576	0.115
	Disability Stigma			-1.307	0.109	-0.443	-11.995	< .001***
	Disability Identity X Disability Stigma			0.056	0.022	0.090	2.565	0.011*

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

For Block 1, the model fit was significant $F(6,694) = 2.153$, $p = .046$, accounting for approximately 2% of the variance in QOLS scores ($r^2 = .018$). Gender identity [$t(694) = -3.025$, $p = .003$] was the only significant contributor in this block. For Block 2, the model fit was also significant $F(8,692) = 27.884$, $p < .001$, accounting for an additional 22.6 % of the variance in QOLS scores ($\Delta r^2 = .226$). In this block, disability stigma [$t(692) = -11.995$, $p < .001$], gender identity [$t(692) = -3.419$, $p = .001$], and ethnicity [$t(692) = 2.292$, $p = .022$] each were significant contributors. In Block 3, the model fit was again significant $F(9,691) = 25.716$, $p < .001$ and accounted for an additional 0.7% of the variance ($\Delta r^2 = .007$) in QOLS scores. In this block, disability stigma x disability identity [$t(691) = 2.565$, $p = .011$], stigma [$t(691) = -11.995$, $p < .001$], gender identity [$t(692) = -3.527$, $p < .001$], and ethnicity [$t(692) = 2.565$, $p = .011$] each were significant contributors to the model.

Overall, Hypothesis 1 was supported. When controlling for demographic variables, disability identity had a significant moderating effect on the relationship between disability stigma and quality of life. In the second step, prior to the inclusion of the interaction between disability stigma and disability identity, for every one point increase in SSCI scores, QOLS scores decreased by 0.46 points. In the third step, this impact was reduced with the inclusion of the interaction between stigma and disability identity. In this model, for every one point increase in SSCI scores, QOLS scores decreased by .443 points. For every one point increase in the interaction between SSCI and PIS, QOLS scores increased by .090. In other words, the increased presence of disability identity significantly moderated the negative impact of disability stigma on quality of life. As one reported a greater sense of disability identity, the negative impacts of stigma from their disability were reduced improving the individual’s overall quality of life.

Question 2

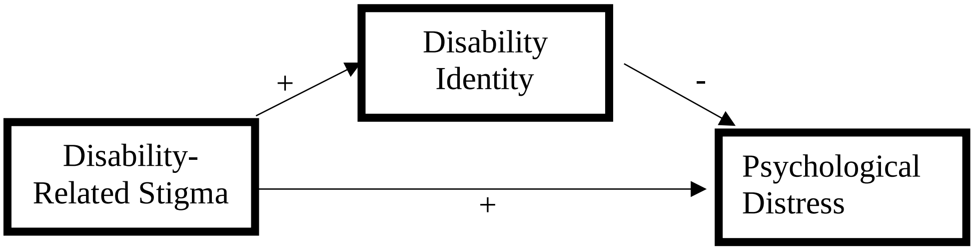
This study's second research question asked the following:

Q2 How does disability identity predict the effect of disability-related stigma on psychological distress experienced by people with disabilities?

Among the current sample, 724 participants completed all relevant measures and were eligible to be included in this analysis. Commensurate with Hypothesis 1, Hypothesis 2 postulated that the results of a hierarchical multiple linear regression would show that, disability identity, as measured by the PIS, would significantly moderate the relationship between disability stigma and psychological distress, when controlling for demographic variables, specifically race, age, sexual orientation, gender identity, socioeconomic status, and level of education in accordance with the rejection identification model (Branscombe et al., 1999). The hypothesized moderation effect is shown in Figure 5 below.

Figure 5

Hypothesized Moderation Effect of Disability Identity Between Disability-Related Stigma and Psychological Distress



A hierarchical regression analysis was conducted to test Hypothesis 2. In this analysis, psychological distress served as the dependent variable and was operationalized by the K10 total score. The control variables of age, ethnicity, gender identity, sexual orientation, education level, and employment status each were entered in the first block. In the second block, disability stigma, as operationalized by the SSCI total score, and disability identity, as operationalized by the PIS total score, each were entered. Finally, the primary independent variable of interest, the interaction between disability stigma and disability identity was created by computing the product of these two variables and entered in the third block. Results of this hierarchical regression analysis are described below in Table 9.

Table 9

Regression Analysis for Hypothesis 2 (n = 724)

	Variable	r^2	Adj r^2	B	*SE* B	β	*t*	*p*
Block 1	Model	0.03	0.022					
	(Constant)			27.686	1.401		19.756	< .001***
	Level of Education			-0.137	0.141	-0.037	-0.975	0.33
	Employment Status			-0.370	0.101	-0.141	-3.673	< .001***
	Sexual Orientation			-0.427	0.243	-0.070	-1.762	0.078
	Ethnicity			0.494	0.187	0.098	2.641	0.008**
	Age			0.010	0.027	0.014	0.367	0.714
	Gender Identity			0.118	0.469	-0.010	-0.252	0.801
Block 2	Model	0.449	0.443					
	(Constant)			29.298	1.085		27.015	< .001***
	Level of Education			-0.167	0.107	-0.045	-1.558	0.120
	Employment Status			-0.046	0.077	-0.018	-0.595	0.552
	Sexual Orientation			-0.461	0.183	-0.076	-2.516	0.012*
	Ethnicity			0.175	0.142	0.035	1.231	0.219
	Age			-0.042	0.020	-0.059	-2.037	0.042*
	Gender Identity			0.135	0.357	0.012	0.379	0.705
	Disability Stigma			0.702	0.035	0.627	20.197	< .001***
	Disability Identity			-0.133	0.052	-0.080	-2.575	0.010*
Block 3	Model	0.45	0.443					
	(Constant)			29.178	1.088		26.824	< .001***
	Level of Education			-0.151	0.108	-0.041	-1.394	0.164
	Employment Status			-0.044	0.077	-0.017	-0.573	0.567
	Sexual Orientation			-0.483	0.184	-0.079	-2.628	0.009**
	Ethnicity			0.198	0.143	0.039	1.382	0.167
	Age			-0.038	0.021	-0.054	-1.854	0.064
	Gender Identity			0.116	0.357	0.010	0.324	0.746
	Disability Stigma			0.710	0.035	0.634	20.127	< .001***
	Disability Identity			-0.141	0.052	-0.085	-2.713	0.007**
	Disability Identity X Disability Stigma			0.009	0.007	0.039	1.318	0.188

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

For Block 1, the model fit was significant $F(6,717) = 3.743$, $p = .001$, accounting for 3.0% of the variance in QOLS scores ($r^2 = .030$). Current employment status [$t(717) = -3.673$, $p < .001$] and ethnicity [$t(717) = 2.641$, $p = .008$] were significant contributors in this block. For Block 2, the model fit was also significant $F(8,715) = 72.757$, $p < .001$, accounting for an additional 41.8 % of the variance ($\Delta r^2 = .418$). In this block, sexual orientation [$t(715) = -2.516$, $p = .012$], age [$t(715) = -2.037$, $p = .042$], disability stigma [$t(715) = 20.197$, $p < .001$], and disability identity [$t(715) = -2.575$, $p = .010$] were significant contributors to the model. In Block 3, the model fit was again significant $F(9,714) = 64.932$, $p < .001$; however, this only accounted for an additional 0.1% of the variance ($\Delta r^2 = .001$) in psychological distress. Although this model was significant when viewed alone, it did not account for a significant proportion of the variance in psychological distress above and beyond the previous step [$\Delta F(1,714) = 1.736$, $p = .188$].

Overall, Hypothesis 2 was not supported. When controlling for demographic variables, disability identity did not have a significant moderating effect on the relationship between disability stigma and psychological distress. Rather, the strongest predictor of psychological distress within the model set was disability-related stigma ($\beta = 0.634$; See Table 9).

Question 3

This study's third research question asked the following:

> Q3 How does one's disability experience, including onset, obviousness, and functional impact of one's disability account for variance in one's disability identity?

Among the sample, 801 participants were eligible to be included in this analysis. It was hypothesized that onset of disability (congenital or acquired), obviousness of disability, and its functional impact, all measured by single-item demographic questions, would each be significant predictors of the amount of disability identity independently, after controlling for the specific demographic variables of race, age, sexual orientation, gender identity, socioeconomic status, and level of education.

A hierarchical regression analysis was conducted. In this hierarchical regression analysis, disability identity, as measured by the PIS, served as the dependent variable. The control variables of age, ethnicity, gender identity, sexual orientation, education level, and employment status were each entered in the first block. For this block, the model fit was significant, $F(6,794) = 9.173$, $p < .001$. Significant contributors to this model included level of education $t(794) = 3.652$, $p < .001$; employment status $t(794) = 4.183$, $p < .001$; ethnicity $t(794) = -2.030$, $p = .043$; and gender identity $t(794) = 3.875$, $p < .001$. In Block 2, onset of disability (congenital or acquired), obviousness of disability, and functional impact of disability each were entered. The model fit for Block 2 was also significant $F(9,791) = 13.069$, $p < .001$, as was the change in predictive value for Block 2 when compared to Block 1 $\Delta F(3,791) = 19.572$, $p < .001$. Significant predictors in this Block included; level of education $t(791) = 4.078$, $p < .001$; employment status $t(791) = 4.660$, $p < .001$; age $t(791) = 2.405$, $p = .016$; gender identity $t(791) = 3.973$, $p < .001$; obviousness of disability $t(791) = -3.279$, $p = .001$; functional impact of disability $t(791) = -3.040$, $p = .002$; and onset of disability (congenital or acquired) $t(791) = -3.456$, $p = .001$. This Block accounted for an additional 6.5% of the variance in disability identity above and beyond the predictive value of Block 1 ($\Delta r^2 = .065$). These results are further outlined below in Table 10.

Table 10

Regression Analysis for Hypothesis 3 (n = 801)

	Variable	r^2	Adj r^2	B	*SE* B	β	*t*	*p*
Block 1	Model	0.065	0.058					
	(Constant)			18.280	0.799		22.883	< .001
	Level of Education			0.288	0.079	0.129	3.652	< .001
	Employment Status			0.240	0.057	0.149	4.183	< .001
	Sexual Orientation			-0.004	0.138	-0.001	-0.030	0.976
	Ethnicity			-0.214	0.106	-0.070	-2.030	0.043
	Age			0.019	0.015	0.044	1.254	0.210
	Gender Identity			1.034	0.267	0.144	3.875	< .001
Block 2	Model	0.129	0.12					
	(Constant)			22.039	0.939		23.479	< .001
	Level of Education			0.317	0.078	0.142	4.078	< .001
	Employment Status			0.265	0.057	0.164	4.660	< .001
	Sexual Orientation			-0.078	0.134	-0.021	-0.580	0.562
	Ethnicity			-0.102	0.104	-0.033	-0.983	0.326
	Age			0.036	0.015	0.084	2.405	0.016
	Gender Identity			1.025	0.258	0.143	3.973	< .001
	Obviousness of Disability			-0.453	0.138	-0.130	-3.279	0.001
	Functional Impact of Disability			-0.444	0.146	-0.121	-3.040	0.002
	Onset of Disability (Congenital or Acquired)			-1.132	0.327	-0.121	-3.456	0.001

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

Hypothesis 3, that characteristics of one's disability, specifically obviousness of disability, functional impact of disability, and onset of disability (congenital or acquired) would be significant and meaningful predictors of one's level of disability identity was fully supported. For each categorical increase in obviousness of disability, one's level of disability identity decreased by .13 points (β = -0.130). In other words, as an individual's disability was more obvious to those around them, the presence of disability identity was lower. Similarly, for every categorical increase in one's functional impact of disability, one's level of disability identity decreased by .121 points (β = -0.121). More specifically, as someone experiences a greater degree of impact from their disability, disability identity is less present. Finally, for onset of disability (congenital or acquired), when one's disability is acquired compared to congenital, their level of disability identity also reduced by .121 points (β = -0.121). Each of the hypothesized variables had a significant and meaningful predictive effect on an individual's level of disability identity (as measured by the PIS). These results provide evidence that the characteristics of one's disability significantly impact one's level of personal identification with their disability.

Question 4

The study's fourth research question asked the following:

> Q4 Does one's intersectional identities (e.g. race, age, sexual orientation, gender identity, socioeconomic status, & level of education) predict their disability identity?

As a reminder, no formal hypotheses were generated for this research question as there has been no published literature as of yet that has examined the relationship between one's various intersectional identities and the presence of disability identity. Thus, this research question was analyzed through an examination of Block 1 in the multiple linear regression for hypothesis testing of Question 3. In this simple linear regression analysis, disability identity, as measured by the PIS, served as the dependent variable. The independent variables that were entered into the regression model in Block 1, the step of analysis pertinent to this question, were age, ethnicity, gender identity, sexual orientation, education level, and employment status. For this block, the model fit was significant, $F(6,794) = 9.173$, $p < .001$. Significant contributors to this model included level of education $t(794) = 3.652$, $p < .001$; employment status $t(794) = 4.183$, $p < .001$; ethnicity $t(794) = -2.030$, $p = .043$; and gender identity $t(794) = 3.875$, $p < .001$. All results for this regression can be reviewed in Table 10 above. Although no formal hypothesis was generated for this research question these findings provide initial evidence to examine for further relationships between how education, employment status, ethnicity and gender identity may impact the development of one's disability identity.

Summary of the Findings

This chapter consisted of a description of the reliabilities of the sample for each measure used, in comparison to previously completed studies. This was followed by a discussion of descriptive statistics for each measure. Finally, this chapter then concluded with results specific to the hypotheses that were derived from this study's research questions.

According to the results of this study, the presence of increased disability identity significantly moderates the negative effect of disability-related stigma on an individual's quality of life. As the interaction effect between disability-related stigma and disability identity increased, it was shown to both reduce the overall negative impact of stigma and increase quality of life scores. In contrast to this result, similar findings were not observed when examining the hypothesized moderation effect of disability identity between stigma and psychological distress. Rather, the presence of increased disability identity did not significantly impact the relationship between stigma and psychological distress, as greater endorsement of stigma was the strongest predictor in the measured model of higher endorsement of psychological distress symptoms.

Provided with evidence for disability identity significantly moderating the negative impact of disability-related stigma on quality of life, it was also important in this study to examine factors which were hypothesized to impact the presence of disability identity in the participants. Notably, factors specific to one's experience of disability including specifically one's obviousness of disability, level of functional impact of heir disability, and the nature of onset of their disability, whether it was congenital or acquired, were all significant predictors of the presence of disability identity. As one's obviousness and functional impact of their disability increased, an inverse relationship was observed with disability identity. In other words, in participants who experienced a greater degree of functional impairment because of their disability or because their disability was more obvious to those around them, their sense of disability identity was lower. Notably, individuals who had a congenital diagnosis of disability had an overall greater sense of disability identity than those who acquired their disability later in life. This study also examined other factors salient to one's constellation of identity traits to investigate how different intersectional identities may impact the presence of disability identity. Of note, multiple identity traits, including one's level of education, employment status, ethnicity and gender identity, were significant predictors of disability identity.

CHAPTER V

DISCUSSION AND IMPLICATIONS OF THE RESEARCH

Many people will experience having a disability at some point throughout their life. With research predicting an increase in the incidence rate of disability (Okoro et al., 2018; Taylor, 2018) along with a notable absence of disability-related scholarship in the field of counseling psychology (Olkin & Pledger, 2003), it is imperative that we increase our understanding of this unique component of human diversity. The purpose of this study was to examine the various relationships between disability identity, disability-related stigma, psychological distress, and quality of life among PWDs. Specifically, this study represents one of the first attempts to quantitatively identify the role that disability identity may play in moderating the effect of disability-related stigma on both quality of life and psychological distress among PWDs. This was completed through an application of the Rejection Identification Model (RIM; Branscombe et al., 1999) to the construct of disability.

This study ultimately addressed multiple gaps in the existing literature base. Most notably, this study sought to increase the field’s understanding of the social complexities of disability and how having a disability potentially may alter clinical considerations and therapeutic interventions for our clients. In other words, this study aimed to develop an evidence base upon which counseling psychologists and other mental health practitioners would be better able to recognize and comprehend the effects that developing or holding a sense of disability identity may have on their clients’ quality of life. Secondarily, this study intended to answer numerous calls to action for increased research focus on disability (Forber-Pratt et al., 2017; Kemp & Mallinckrodt, 1996; Olkin, 2008, 2017). In so doing, this study pushes forth discussions of disability status in conversations of intersectionality, cultural humility, and diversity in counseling psychology.

In addition to the gaps that this study addressed, this study's sample had several strengths when compared to similar prior research. For one, the obtained sample size of PWDs (*n* = 873) was larger and more representative of traditionally marginalized ethnic groups in the U.S. population than previous studies (Bogart, 2014, 2015; Bogart et al., 2018). In the current sample, approximately 70% of participants were members of minority ethnic groups, with only 29.9% of the sample identifying as Caucasian/European American/European. In similar previously completed studies, representation of traditionally marginalized identities only accounted for between 10 to 15% of the sample (Bogart, 2014, 2015; Bogart et al., 2018).

Further, the sample included in this study was notably more diverse in terms of demographic information collected including age, sexual orientation, gender identity, employment status, and level of education than those in previous similar studies. Previous studies often either did not collect demographic information pertinent to one's intersectional identities such as gender identity or sexual orientation or assumed a traditional gender binary that did not allow participants to select different responses (Bogart, 2014, 2015). In this study, approximately 3% of the sample identified with a gender other than they were assigned at birth, and approximately 30% identified as LGBTQ+, which allowed this study to gain a better understanding of the intersection of gender and sexual minorities and disability. Finally, the sample in this study also was notably heterogeneous concerning the different types of disabilities that were held by the participants. While most previous studies have examined a specific diagnosis of disability, the present study is one of the only studies of disability identity in which disability was not operationalized to only include a single diagnosis or type of disability.

In short, this study examined whether disability identity significantly moderated the relationship between disability-related stigma and both quality of life and psychological distress. This study also investigated factors that may influence the presence of disability identity, including one's unique experience of disability and other intersectional identities. Overall, this study showed that the presence of disability identity significantly moderated and reduced the negative impact of disability-related stigma on quality of life. Notably, as the interaction between disability identity and disability-related stigma increased, subsequent positive changes were observed in these participants’ quality of life, providing evidence for disability identity as a possible intervention target for clinicians working with PWDs. However, this same result was not observed for the moderation of the relationship between disability-related stigma and psychological distress. Rather, there was no significant effect of the interaction between disability-related stigma and disability identity on psychological distress.

This study also provides initial evidence for characteristics that are associated with the development of disability identity. Namely, characteristics of one's disability including the obviousness of their disability, the functional impact of one's disability, and whether their disability was congenital or acquired, each were significant predictors of their level of disability identity. Specifically, as the obviousness of one’s disability and functional impact of their disability identity increased, their level of disability identity was found to decrease. Similarly, among those individuals who had an acquired disability, their level of disability identity was significantly less than among those with a congenital disability.

Finally, this study is the first to explore the potential impact of other components of an individual's identity, aside from their disability, on the presence of disability identity. This study showed that education, employment status, and gender identity each had a predictive impact on one’s disability identity. In doing so, this study provided an entry for researchers to continue investigations of variables associated with the presence of disability in hopes of illustrating how aspects of a PWD’s identity may intersect and change their clinical presentation. In other words, a continuation of this line of research may illuminate potential factors for consideration in client conceptualization and treatment which may be particularly relevant for mental health practitioners working with PWDs.

Discussion of the Results

Specific Findings for the Hypotheses

The first hypothesis tested in this study asserted that results of a hierarchical regression would show that disability identity would significantly moderate the relationship between disability-related stigma and quality of life. Overall, the results of this study significantly supported this hypothesis. First, this regression revealed that as disability-related stigma increased among the sample, their quality of life decreased. However, as the interaction between disability-related stigma and disability identity increased, quality of life scores increased, indicating that the presence of disability identity was a moderating and protective factor against the negative impact of disability-related stigma.

It is important to acknowledge that this regression also further highlighted how when a PWD is experiencing stigma based on their disability, they experience an overall negative impact on their quality of life. While evidence in this study illuminates that disability identity can moderate and protect against this relationship, other researchers have still postulated repeatedly that the degree of prejudice and discrimination experienced by PWDs tends to be more persistent and pervasive than what is experienced by other marginalized groups of people (Albrecht, 1992; Olkin, 2002; Smart & Smart, 2006). Further, they have argued that the stigma and discrimination experienced by PWDs may have a more negative impact on overall life satisfaction than does one's actual diagnosis of disability (Daley et al., 2018). This result falls in line with these arguments demonstrating the psychosocial impact of stigma on one's quality of life. However, as the interaction term between disability-related stigma and disability identity was included in the regression analysis, it was observed that an increase in this interaction resulted in increased quality of life among PWDs. A higher value interaction term is representative of the product of a greater degree of disability identity and experienced stigma related to one's disability. This result in the final step of the regression analysis appears to indicate that the presence of disability identity may protect against the negative impact of disability-related stigma, illustrating how the enhancement of one's disability identity may be an important consideration when working with PWDs in a clinical care setting.

Support for this hypothesis is commensurate with findings in previous studies which have examined the role of disability identity within the rejection identification model. Specifically, in the most similar study to the current study, Bogart et al. (2018) observed that disability pride mitigated the negative impact of stigma on self-esteem among PWDs. Both the results of the current study and this previous research provide evidence that when disability is viewed in context as a possible valuable, enriching, and positive experience in one's life, individuals appear to be more likely to question the presence or rationality of disability stigma and therefore minimize its overall negative effects on their life.

The second hypothesis in this study was similar to the first; however, rather than seeking to understand the moderating relationship of disability identity between disability-related stigma and quality of life, instead it sought to observe the potential moderating effect of disability identity between disability-related stigma and psychological distress. In contrast to the first hypothesis, the results of this analysis were not supported. Although the regression model including the calculated interaction or moderation effect between disability-related stigma and disability identity was significant in its impact on psychological distress, the inclusion of the moderating effect of disability identity did not account for a significant proportion of the variance in psychological distress above and beyond the previous model. In other words, the moderation effect of DI itself was not significant as a predictor of psychological distress, and disability identity did not hold a similar protective effect on psychological distress as it did for quality of life.

This result was unexpected; however, some possible explanations may help us to better understand this result in context. First, it is important to understand the strength of the predictive effect of disability-related stigma on psychological distress. As detailed in Table 10 (Chapter IV), disability-related stigma [$t(715) = 20.127$, $p < .001$], was an exceptionally strong predictor of psychological distress. Put another way, for every one-point increase in disability-related stigma scores among this sample, psychological distress increased by .634 points. These results illustrate how these variables are strongly associated with one another. As some research has shown, when core negative evaluative beliefs about the self are associated with the experience of stigma, feelings of being different or internalization of the experienced stigma increases (Dagnan & Waring, 2004). This internalization of stigma has been shown to produce profound negative impacts on one's psychological well-being (Dagnan & Waring, 2004). While the presence of increased disability identity was not shown to significantly moderate the negative impact of disability-related stigma among the current sample, it is important to also illustrate how the possible complexities of this relationship may not be holistically captured by the current analysis.

Due to the design of this study, the data collected were obtained at a single time point, meaning that it should only be viewed as a snapshot of the participants' lives, and it, therefore, does not provide any understanding of the relationship between these variables longitudinally. With this design, it is possible that the computed interaction variable, disability identity X disability-related stigma, does not effectively capture the theorized protective effect of disability identity over time. Previous research has shown that the presence of disability identity does significantly predict decreased anxiety and depressive symptoms among a sample of individuals who had been diagnosed with multiple sclerosis (Bogart, 2015). While the previous study's results seem to contradict the current study's findings, it is important to note that the previous study did not include a measure of disability-related stigma in its analyses. Consequently, it is important to acknowledge that a possible explanation for the observed result may be that the protective effect hypothesized to be provided by disability identity on psychological distress, is not as predictive of overall psychological distress as is the relationship between stigma and psychological distress. In other words, it may be that the presence of disability identity does predict lower psychological distress levels, however, when interpreted in context with one's experience of disability-related stigma, disability-related stigma is a much more impactful factor in one's experience.

The third hypothesis in this study proposed that factors associated with one's experience of disability, including the onset of their disability (congenital or acquired), the obviousness of their disability, and the functional impact of their disability, each would be significant predictors of disability identity. This hypothesis was fully supported. Each of the three listed characteristics was a significant predictor of disability identity. For obviousness of one's disability, as one's disability was more obvious to others, their level of disability identity decreased. Similarly for functional impact of their disability, as one experienced higher degrees of impairment in their daily life due to their disability, disability identity also decreased. Finally, when examining the onset of disability (congenital or acquired), those who acquired their disability later in life had significantly lower levels of disability identity when compared to those who had a congenital disability.

While these results provide solid foundational evidence for the characteristics of one's disability experience as it impacts their experience of disability identity, it is important to also attempt to explain the nature of these relationships in context. When thinking about lower levels of disability identity observed in individuals with increased obviousness of their disability, one explanation may be their overall experience of stigma. In other words, it may be that as one sees their disability as more obvious to those around them, they then may experience greater rates of disability-related stigma and discrimination which may impede the development of a more positive sense of disability identity in many ways. For example, if one's obviousness of disability leads to incidents of disability-related stigma and discrimination in their attempts to find employment, a common experience for PWDs, it may be increasingly difficult to identify with positive aspects of one's disability (Heymann et al., 2022). Consequently, one may be more likely to internalize disability-related stigma rather than question its' validity or presence. The same could also be true for the negative relationship between one's functional impact of disability and disability identity. As one experiences a higher degree of functional impairment or limitations as a result of their disability, its association with more positive aspects of the disability experience may be more challenging for individuals to internalize.

The relationship between the onset of disability and disability identity has been explored much more than the previous two aspects of the disability experience. In one previous study (Bogart, 2014), congenital onset of disability also predicted a greater degree of disability identity, commensurate with the results in this study. Likely, the difference in presence of disability identity between the time of onset for PWDs has to do largely in part with an individual's adaptation to a new baseline level of functioning. In other words, an individual who has a congenital disability diagnosis is likely more accustomed to, in many ways, any functional impacts that they may experience in various areas of their life. By contrast, someone who acquires a disability later on in their life is likely also engaging in a process in which they are then having to adapt to a new way of functioning, which may include more substantial limitations than they were previously accustomed to in some areas. Thus, this adjustment may take away from or delay the development of their disability identity. Although not directly examined in this study, an interesting question arises from this possible explanation. Does one's presence of disability identity increase over time since their initial diagnosis or acquisition of the disability? This question may provide more insight into one's overall adjustment and adaptation to having a new disability and how this may impact one's sense of self over time.

The fourth research question asked how other intersectional aspects of one’s identity, aside from the disability-related characteristics that were investigated by Hypothesis 3, may influence the presence of disability identity. No formal hypothesis for this question was provided as the intersections of these identity factors as they relate to disability identity have not previously been examined by any peer-reviewed studies to this writer’s knowledge. Research question 4 examined six independent variables thought to potentially intersect with and influence how one perceives disability within their identity: age, ethnicity, gender identity, sexual orientation, education level, and employment status.

Results of this analysis revealed that three of the aforementioned six identity variables tested in this research question had a significant predictive effect on the presence of disability identity among this sample: gender identity, level of education, and employment status. Although no formal hypothesis was generated, this result emphasizes the importance of working to better understand the presence of a disability for an individual in conjunction with the greater picture of their life. In other words, this result provides evidence for the intersectionality of identities and how other aspects of an individual's life may impact how, or if, they come to develop a more positive sense of identity associated with their disability. Consequently, it is imperative for future researchers to further examine these relationships and other pieces of one's intersectional identity in subsequent investigations of disability identity and the experience of having a disability.

Clinical Implications of the Results

Hypothesis testing in the current study not only provided answers to the specific research questions but also offered implications in a more general context that contributes to our overall understanding of the disability experience. This greater overall understanding affords future directions for the field of health service psychology in work with PWDs. The primary outcome goal in this study was to establish a greater knowledge base that provides indications of possible ways to approach and provide more evidence-based psychological treatment for PWDs. The research questions aimed to do this by increasing the field's understanding of important points of consideration in the conceptualizations of the scope of disability as it relates to a PWD's presenting concerns. Further, the research questions aimed to highlight specific protective effects observed with the presence of disability identity in hopes of developing new interventions from an affirmative model of care for disability. The results of this study accomplish these feats in several ways.

First, as previously mentioned, this study provides some evidence for the protective effect of disability identity in line with the Rejection Identification Model originally proposed by Branscombe et al. (1999). Support for this model in the context of disability suggests that the placing of a focus and emphasis on minority group identification may be the best predictor of psychological well-being among devalued or marginalized groups (Branscombe et al., 1999). In other words, the results of this study provide a clinical indication to develop interventions centered on promoting a sense of positive identification with the disability and fostering a sense of connection to the disability community to protect against the negative impacts of disability-related stigma. It is important to note that this is true in a scenario where a person is experiencing negative impacts on their quality of life because of, or due in part to, the presence of a disability; however, it remains important for mental health practitioners of all types to clinically assess for what all presenting concerns and factors may be impacting any client at a given time. As shown in this study, several factors can predict a PWD's quality of life and/or psychological distress which do include, but are certainly not limited to, certain aspects of their disability. It is a potentially harmful generalization to state that these types of interventions will work across contexts for all PWDs. Rather, these interventions should be targeted for individuals who are disclosing ways in which their experience with a disability may be limiting their satisfaction or quality of life somehow.

Another goal of the current study was to further our understanding of factors that contribute to the presence or development of a positive sense of disability identity for some PWDs but not for others. Such knowledge may be helpful to define certain clinical considerations that may be particularly relevant for PWDs in clinical treatment. Results of this study provided strong evidence for the factors associated with one's experience of disability in predicting their current level of disability identity. All three tested aspects of one's disability experience in this study, namely (a) onset of one's disability, (b) the obviousness of one's disability, and (c) functional impact of one's disability, were significant predictors of disability identity. Put more simply, one's unique experience of their disability is likely to impact their perception of their disability.

With this simple statement, it is important to acknowledge how this perspective could shift thinking in a clinical context. While acknowledging some similarities across the spectrum of one's disability experience, it is imperative to also recognize differences between unique individuals and then incorporate client response specificity into practice with PWDs (Teyber & Teyber, 2014). By acknowledging individual differences, whether small or large, between PWDs’ experiences, clinicians are protecting against the risk of diagnostic overshadowing. Mental health practitioners such as counseling psychologists naturally tend to attribute behavior to salient factors; thus, when a disability is readily apparent, clinicians are likely to make several attributions that may not be accurate (Levitan & Reiss, 1983). Counseling psychologists and other mental health practitioners may be exceedingly likely to make many of the mistakes often associated with cross-cultural counseling (Olkin, 2017). This may include overinflating or assuming meaning from the presence of disability and thus omitting critical case information in treatment. Conversely, it may also include disregarding one’s marginalized identity and discounting its importance (Olkin, 2017). Consequently, it is vitally important for any mental health practitioner to develop a clinical understanding of a person's unique experience with their disability to better understand how it may or just as important may not impact their current presenting concern.

A final broad implication of this study is an increased awareness of the ripple effects of the systemic position of disability in the U.S. culture. This study actively highlights how the systemic position of disability in society has contributed to a lack of emphasis on disability in clinical training and research for psychologists and other mental health practitioners. To this writer’s knowledge, this is the first study that has examined factors that are non-specific to one’s experience of disability. This study examined aspects of participants’ intersectional identities and their subsequent effect on the presence of disability identity. Unfortunately, as this study is the first to examine the intersection of disability along with other aspects of identity, the examination of these factors was exploratory. However, these results do highlight the need to further explore several meaningful aspects of identity which fundamentally impact one's experience of disability, particularly including one’s level of education, current employment, and gender identity.

This research must be continued at this time. Without a further understanding of disability as a component of human diversity and a greater comprehension of how the presence of a disability intersects other aspects of one's personal life, practitioners are not able to adequately consider the cultural and societal context that could be directly influencing the experiences of their clients. For example, for one man with autism spectrum disorder (ASD) and mild intellectual disability (ID), a retrospective study of five of his clinicians in an inpatient psychiatric facility illuminated how these staff had observed behaviors that, in retrospect, were clear indicators of possible sexual abuse and attempts by the patient to disclose this abuse during his treatment (Kildahl et al., 2020). However, during this patient's admission, the sexual abuse that this patient had experienced was not identified by his team. Rather his behaviors and attempts to disclose the abuse were attributed to symptoms of his disability and not further explored (Kildahl et al., 2020). Without proper training for mental health practitioners to understand and approach disability as an aspect of diversity rather than as an impairment or deficit, both the practitioner and client suffer. Without such training, when disability is instead conceptualized inappropriately, aspects of an individual's presentation can be grossly misattributed drastically changing treatment outcomes.

This unfortunate example of diagnostic overshadowing is particularly heinous, though unfortunately well within the range of outcomes when mental health practitioners are operating without proper training to examine cultural considerations specific to working with PWDs. When working with all clients, especially those with a disability or another traditionally marginalized identity, it is essential to be able to consider the impact of all aspects of their identity, including associated social stigma, marginalization, discrimination, power, and social connection and how they may alter a client’s clinical presentation (Olkin, 2017). It is vital to understand how a person's identities impact their presentation in session and their daily life. However, this research has highlighted once again our field's limited understanding of how disability contributes to the diversity of human experience in our clients.

Limitations of the Study

While this study addressed several gaps in the current literature base regarding our general understanding of the disability experience, some limitations that were present in the study design also warrant further discussion. One important limitation regards the sample, which was obtained from just one regional federally funded training and technical assistance center, the Rocky Mountain Americans With Disabilities Act Center. Likely, this study was not able to recruit or capture the experience of many PWDs but who are not connected to a disability-specific training or technical assistance center. This is particularly important as there may be key differences between individuals who are connected to these organizations when compared to those who are not. For example, when compared to those who are not connected with a disability-specific training or technical assistance center, those who are connected may report a greater sense of connection to the disability community and in turn may also report a greater sense of disability identity (Dunn & Burcaw, 2013). Further, as observed among the demographic information collected in this study, those who are connected to a training and technical assistance center are more likely to be employed. In this study, 67.1% of the participants held some manner of employment, in comparison to the national estimate of only 19.1% of PWDs being employed in the civilian work force (U.S. Bureau of Labor Statistics, 2022). Thus, it is likely that this study’s sample does not accurately represent the distribution of disability identity experienced by PWDs and instead is negatively skewed toward those who may be more affluent as a result of their current employment status. Consequently, when interpreted in context with further results of this study illustrating that one’s employment status is predictive of the degree to which they experience disability identity, it is likely that estimates of disability identity that are provided in this study are skewed in the direction of those who were currently employed.

Furthermore, since the Rocky Mountain ADA Center serves only those in the Rocky Mountain region, this sample's results may not be generalizable to PWDs from different regions within the U.S. or more broadly to international populations. There are notable differences between this region and many others. First, the Rocky Mountain region of the U.S. has notably high rates of psychological distress without appropriate access to mental health care, when compared to other regions in the U.S (Kaiser Family Foundation, 2022; Pepper, 2017). Unfortunately, high rates of psychological distress in the Rocky Mountain region are highlighted by the highest rates of suicide in the country (Pepper, 2017). In fact, of the six states served by the Rocky Mountain ADA Center, three are in the top five for rates of suicide in the U.S.: Wyoming, Montana, and Colorado (Kaiser Family Foundation, 2022). Further, during the period of time in which data were collected for this study, the summer of 2021, all but one state (North Dakota) that is served by the Rocky Mountain ADA had above average rates of adults with an anxiety or depressive disorder with an unmet need for counseling, with three states in the top ten; South Dakota, Wyoming, & Colorado (Kaiser Family Foundation, 2022). It is important to distinguish, high levels of psychological distress and suicidality are not limited to specific subsets of people within the Rocky Mountain region. Rather, rates of suicide are consistently elevated across certain demographics including age, gender, ethnicity, and population density throughout the region (Pepper, 2017). Consequently, one can interpret higher rates of psychological distress and suicidality are representative of a regional cultural difference in the Rocky Mountains when compared to other regions.

Another regional difference of note when thinking about the context of disability is the Rocky Mountain region's propensity for physical activity. According to Centers for Disease Control and Prevention (CDC) data, states within the Rocky Mountain region have some of the lowest rates of physical inactivity in the U.S. (CDC, 2022). For many individuals within the general populous, low rates of physical inactivity are likely a protective factor for their overall health and wellness. However, low rates of physical inactivity in the Rocky Mountain region is an interesting cultural difference when compared to other regions, which may impact PWDs who experience limitations concerning their ability to engage in physical activities. In other words, it is possible that those who experience physical limitations because of a disability may experience a greater degree of disability-related stigma in a region where physical activity is as prevalent as it is in the Rocky Mountain region. While this specific assertion has not been studied independently, it is important to acknowledge that this regional characteristic may have resulted in unintended impacts for the sample in this study, which may include increased experiences of othering or isolation from activities enjoyed by many in the environment. With these regional differences, it is important to clarify that this sample may not be representative of all regions; thus, these results should be generalized only with appropriate context. It is possible though that with these differences, this particular sample may hold a rather negative skew for the amount of disability-related stigma and psychological distress experienced by participants which may not be present to the same degree in other geographical areas.

Another limitation in the present study was the absence of certain methodological techniques that are employed, such as quality assurance items, to identify random or computer-generated response patterns to the survey items. Visual screening of the data set did identify a number of participants who did not appear to respond in a manner that typically would yield an honest self-report, including those who selected the first choice for all items or those whose responses to free-response items were considered to be non-sensical or unintelligible. These participants were ultimately removed by the studies response rate inclusion criteria, as they also had not responded to at least 95% of items. However, data collected in this study did not include quality assurance or honesty checkpoint items that again might have helped to eliminate those who may not have read or answered the study items in a consistent manner. Thus, this study relied on an assumption that participants who completed survey items; read and understood each item and responded honestly to items as an accurate reflection of their experiences. Further, this study removed those who did not respond to 5% or more of items, which in and of itself may have been indicative of inadequate item comprehension or inconsistency in responding. Thus, it is possible that some inconsistent responses ultimately remained in the data set, as they may have been overlooked due to the absence of items included in this study which were designed to ensure comprehension and accurate responding. Future studies are strongly encouraged to include screening items to encourage participants to fully read each item, ensure comprehension of item content, and accurate or honest responses to all items. The inclusion of these items may result in reduction of significant outliers or skew in data collected from poor responses to survey items.

In addition to limitations of the sample, it is also essential to bear in mind that the PIS which was used to measure the presence of disability identity in this study, had a lower internal consistency reliability estimate among this sample when compared to previous studies that also used the PIS (Hahn & Belt, 2004). As previously mentioned, the PIS has been the most widely applied and supported quantitative measure of disability identity in the few studies that have sought to quantitatively operationalize disability identity thus far (Hahn & Belt, 2004; Zapata, 2018). However, the moderately low internal consistency reliability (Cronbach's $\alpha = 0.56$) found for the PIS among the current sample could illustrate that this measure no longer may be as effective for capturing the construct of disability identity after all. An additional analysis was completed post-hoc to determine if item-level variance could be removed to improve reliability of the PIS for future studies. This analysis revealed that the item, "I have a clear sense of what my disability means to me" had a substantial negative effect on the overall internal consistency of the measure within this sample. Notably, this item was negatively correlated with all other items except for, "Being a person with a disability is an important reflection of me." If this one item were to be removed accordingly, the resulting internal consistency reliability for the PIS among this sample would be Cronbach's α = .691. This result is much more comparable to its estimates of internal consistency reliability from previous studies, which ranged from Cronbach's α = .64 to .75 (Bogart et al., 2018; Zapata, 2019).

Additional reliability analyses were completed for the PIS for self-reported type of disability to determine if notable differences in reliability estimates between groups in the sample would be observed that may explain the moderately low reliability observed for the sample. In sum, Cronbach's α ranged between .46 to .73 for all disability types except for *Difficulty bathing or dressing,* which was substantially lower than other types with a Cronbach's α = .32. However, for all disability types including *Difficulty bathing or dressing*, Cronbach's α significantly improved with the item, "I have a clear sense of what my disability means to me" removed. Removing this item improved the range of Cronbach's α among groups based on disability type to be between .58 to .77. Consequently, it was believed that the inclusion of this singular item may have caused the overall lower Cronbach's α coefficient that was obtained among this sample and that differences in the reliability between disability types, though present, were not the cause of this observed effect.

As was previously articulated, the quantitative study of disability identity is an emerging topic of research with only a few studies in this domain having been published to date. In fact, according to a recent review of this literature base, the measurement of disability identity has varied greatly between those few studies, with many studies having low sample sizes available that may provide a poor estimate of the reliability or validity of measurement tools with their samples (Zapata, 2019). To add, among these reviewed studies, only nine included more than 100 participants in their sample (Zapata, 2019). Consequently, with the comparably large sample size of this study, reliability estimates should be comparable or improved if the measure truly operationalized a unitary construct. However, that did not appear to be the case in this study.

Although the PIS has been the most widely used measure of disability identity thus far, it only accounts for two theoretical components of the construct: disability affirmation and disability acceptance (Hahn & Belt, 2004; Zapata, 2019). Other measures of disability identity, such as the four-item measure proposed by Darling and Heckert (2010), instead tend to focus on other theorized aspects of the construct such as disability pride. Further, some domains theorized to be included in disability identity such as self-worth, communal attachment, and personal meaning, which shift the conceptualization of disability identity from an individual to a more communal definition, have yet to be included or operationalized within the quantitative measurement of this construct (Dunn & Burcaw, 2013). It is clear, there is still substantial work to be done to establish a more unitary definition of disability identity and further how to define the construct operationally through quantitative measurement. Although this limitation in defining and measuring disability identity is not necessarily unique to the current study, it is representative of the challenge in quantitatively measuring such a complex construct. To alleviate future limitations in the quantitative assessment of disability identity, future studies should work to establish a more generally accepted definition of a disability identity in order to promote the development of more robust measurement tools with strong reliability and validity metrics among a variety of samples of PWDs.

Finally, it is worth noting that aside from these challenges in measuring disability identity, other variables also were not assessed that might have otherwise affected the results.

First and foremost, the current study did not account for group dynamics associated with disability identity. Previously, disability identity has been conceptualized as including both personal disability identity, which was examined in the current study, and group disability identity, or a sense of belonging to the disability community (Dunn, 2015; Zapata, 2018). Previous research has thus examined several correlates with group disability identity that may have impacted the results of the current study. For example, one prior study measured perceived social support among PWDs and its relation to disability pride (Bogart et al., 2017). In that study, perceived social support was positively associated with higher rates of disability pride; the researchers articulated that receiving social support from others who also have a disability may promote disability pride among PWDs. Unfortunately, the current study did not account for group dynamics and how social support may influence the development of a greater sense of personal disability identity. Consequently, this may be a confounding variable that could have impacted the observed results and may have led to different conclusions if accounted for. Therefore, it is worthwhile to acknowledge that future studies should incorporate social support as a measured covariate to account for this possibility.

Another variable that was not included in this study was self-esteem. Previous research with PWDs has established that a significant relationship between self-esteem and several of the variables included in this study exists (Bogart et al., 2017). As Bogart et al. articulated, self-esteem was directly associated with, and predicted by, pride in one's disability. Further, their results illustrated how greater experiences of disability-related stigma are related to lower overall self-esteem (Bogart et al., 2017). Given these pre-defined relationships, the exclusion of self-esteem as a variable of interest in the present study may limit its ability to draw interpretations about the effectiveness of disability identity in accounting for differences in the effect of disability-related stigma on indicators of wellness such as quality of life and psychological distress.

Future Research Suggestions

Moving forward, there are still numerous gaps in the literature on disability identity and evidence-based practice with PWDs in the field of health service psychology. Blatantly put, there is still a large amount of work to be done to increase our understanding of this aspect of human diversity. Looking ahead, perhaps one of the most useful pieces of future research would be to investigate the development of more psychometrically sound ways to quantitatively operationalize disability identity. As was true in this study, existing measures of disability identity have not been shown to produce robust reliability values across various samples of PWDs (Bogart, 2014; Zapata, 2018). Since the initial development of the current study, Zapata (2019) sought to test a proposed new model for measuring disability identity that may be useful in future studies. Through an aggregation of previous quantitative measures of disability identity, Zapata ultimately added 20 items to the PIS, in order to account for additional components of disability identity than were measured with the version used in this study. Overall, Zapata found a significant four-factor model which includes Pride/Affirmation, Acceptance, Self-Worth, and Positive Personal Meaning. Pride/Affirmation and Acceptance are the two factors previously included in the PIS that was used in this study. Of the 20 additional items added by Zapata, 12 weighted on the Positive Personal Meaning Factor, and eight items weighted on Self-Worth. With the inclusion of these items, the resulting scale ultimately operationalized a greater proportion of theorized domains of disability identity in quantitative measurement and was found to have comparable internal consistency in the development sample to samples in other studies of disability identity measures (Cronbach's $\alpha > .70$; Zapata, 2019). Further, that researcher provided initial evidence of convergent validity through moderate to strong correlations with previous measures of personal disability identity. It is important to note that the initial validation sample for this new measure included only individuals with blindness or low vision. It did not utilize this new measure with other specific disability types, nor was it examined in a broader sample of individuals with varying disabilities. While this proposed measure is a good catalyst for burgeoning research to better quantitatively operationalize disability identity, future research should prioritize the testing of new measures across the spectrum of different disabilities, rather than just with specific subsets of PWDs.

Another avenue of particular importance for researchers to explore in future studies regards what factors may contribute to the development or absence of disability identity among PWDs. Several initial findings for this question were presented in this study. Specifically, this study provided initial evidence of certain factors specific to one's experience of disability, which appeared to impact the presence of disability identity. These factors included the obviousness of one’s disability, the functional impact of one’s disability, and the type of onset of one's disability. Disabilities which were less obvious and that had less of a functional impact on the participants' daily life were predictive of stronger disability identity. The strength of one's disability identity was also partially predicted by the onset of their disability, as congenital disabilities predicted higher disability identity compared to a disability acquired later in life.

Further, evidence of other components of one's life experiences or identity that may also impact the strength of one’s disability identity was found in this study. Of the six variables examined, one's level of education, employment status, and gender identity each were significant predictors of disability identity. While these results provide a foundational evidence base from which mental health practitioners can reference and utilize in their conceptualizations and treatment plans for their clients who have a disability, these results are definitively insufficient. Without a more robust literature base to help illustrate how disability interacts in the context of human diversity, mental health practitioners will perpetually be under-prepared and ill-tooled to appropriately consider the societal and cultural context of disability, which directly influences the life experiences and clinical presentations of their clients. Thus, future research should examine in more depth not only the factors that may be involved or associated with the development of a disability identity for PWDs, but also the processes by which this development occurs.

To do this effectively, it is imperative that future research does not seek to conceptualize one's experience with a disability as solely an individual experience, but rather one that regards the social and societal position of disability along with associated disability-related stigma and marginalization. As was previously articulated, research that excludes the societal context and position of disability is at significant risk to perpetuate the stigma and discrimination experienced by PWDs rather than working to support PWDs and attempt to alleviate these concerns. Research that investigates the intersections of identity, life experiences, and disability has tremendous potential to drastically improve treatment approaches and outcomes for mental health care with PWDs. The results of this line of research may help to develop not only conceptual considerations, but also potential psychological interventions through an understanding of disability identity development. Perhaps most importantly, the continuation of this research can help establish a training model for mental health clinicians to more effectively work with PWDs from a more evidence-based approach. In doing so, it is hoped that the coming generations of mental health practitioners will be better prepared to serve this large component of the population and will be more apt and ready to engage in research and clinical work which further serves to recognize and eliminate the societal stigmas and marginalization toward disability.

Conclusion

This chapter provides a conclusion and thorough explanation of the specific results found in this study. This chapter began with a short overview of the literature gaps that this research aimed to fill, followed by a discussion of specific findings for each hypothesis. Next, broader implications of the findings were reviewed. This was followed by an in-depth examination of the limitations of this study and concluded with suggestions for future research endeavors that will contribute to a burgeoning and useful knowledge base for mental health practitioners to use in their work with PWDs.

The primary purpose of this study was to investigate disability identity and the role that it may play in moderating the effect of disability-related stigma on both quality of life and psychological distress among PWDs. For this purpose, this study examined the relationships between disability identity, disability-related stigma, and indicators of overall well-being among PWDs, specifically one's quality of life and level of psychological distress. Further, this study investigated various aspects specific to one's life experience that may impact the presence or absence of disability identity. The results of this study indicated that the presence of disability identity significantly moderated the negative impact of disability-related stigma on a PWD’s quality of life. In other words, the presence of a positive disability identity was a protective factor leading to a higher quality of life among those impacted by disability-related stigma. However, a similar result was not observed when examining for a moderation effect of disability identity on the relationship between disability-related stigma and psychological distress. These results provide mixed evidence for the effectiveness of one's disability identity in moderating the negative impacts of stigma; however, they are generally consistent with previous research that supports a moderating relationship between disability identity and the negative impacts of disability-related stigma (Bogart, 2014; Bogart et al., 2018).

Further, the results of this study also illustrate how certain aspects of one's disability experience may impact the presence of disability identity in their lives. A greater presence of disability identity was predicted by lower levels of functional impairment, less obviousness of their disability, and among those whose onset of disability was congenital rather than acquired later in life. Finally, other aspects of an individual's identity, including their gender, level of education, and current employment status, each significantly predicted the strength of disability identity, providing further context for future researchers to examine how certain intersectional aspects of one's identity impact their experience of disability.

It is anticipated that future researchers and mental health clinicians can use this research in many ways. From a large lens, it is hoped that researchers and clinicians alike will use this research to help expand their understanding and considerations of disability as an aspect of human diversity rather than as a deficit that may only cause difficulties in one's life. Consequently, it is believed that in doing so, mental health practitioners will be better able to determine how an individual identifies with their disability and how this may or may not contribute to their overall presenting mental health concerns. Just as importantly, it is hoped that mental health practitioners will then be better able to applicably select and adapt clinical interventions tailored for affirmation of one’s disability, promoting the development of a positive disability identity where appropriate. Overall, an increased understanding of the protective effect of disability identity should push clinicians to use more affirmative models of care and provide improved culturally informed services for PWDs. Finally, it is expected this research will continue to catalyze and inspire further research and clinical training for mental health practitioners in order to provide more effective, compassionate, and evidence-based care to the largest minority group in the U.S., being people with disabilities.

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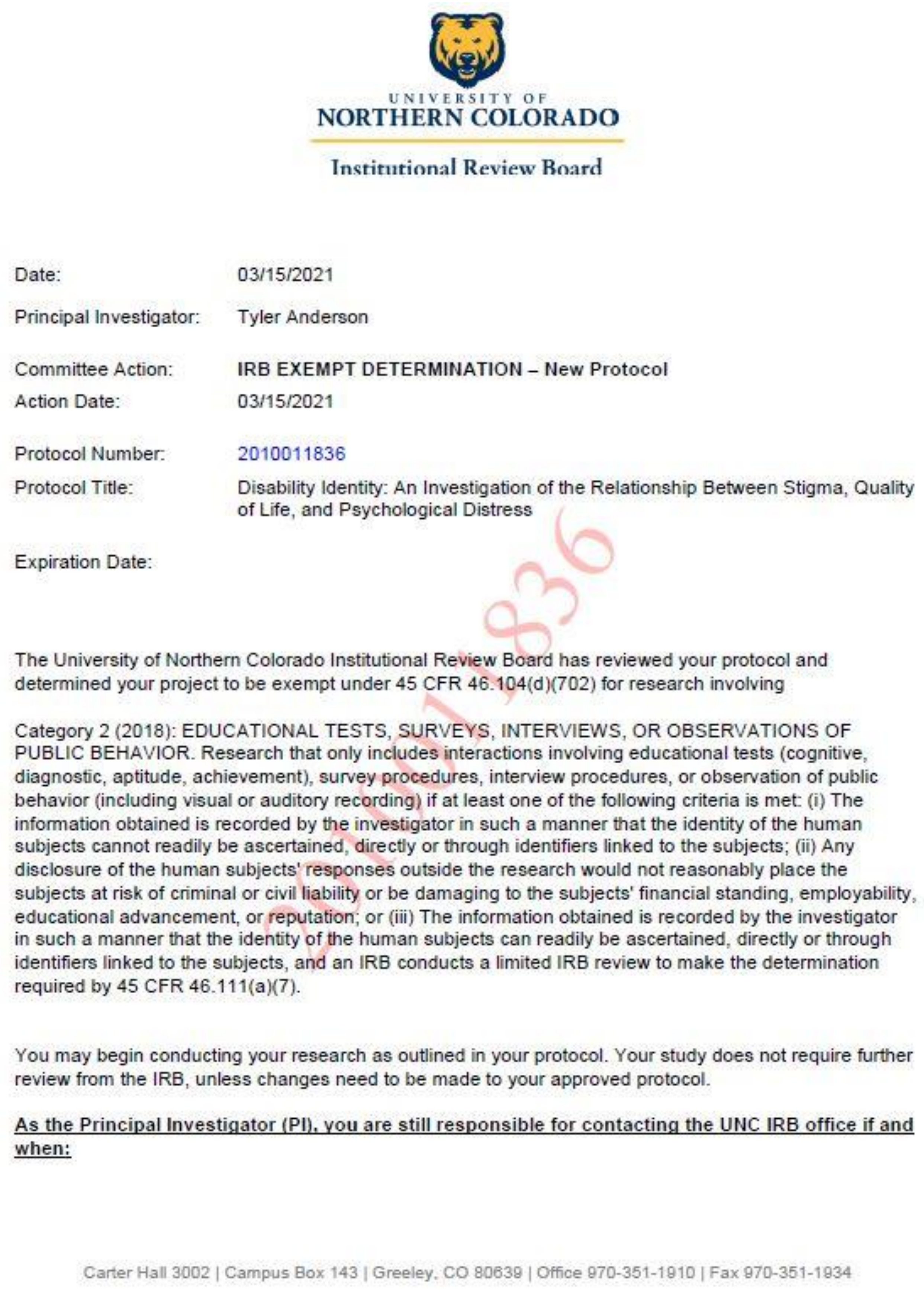
APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL



UNIVERSITY OF
NORTHERN COLORADO

Institutional Review Board

Date: 03/15/2021

Principal Investigator: Tyler Anderson

Committee Action: **IRB EXEMPT DETERMINATION – New Protocol**

Action Date: 03/15/2021

Protocol Number: 2010011836

Protocol Title: Disability Identity: An Investigation of the Relationship Between Stigma, Quality of Life, and Psychological Distress

Expiration Date:

The University of Northern Colorado Institutional Review Board has reviewed your protocol and determined your project to be exempt under 45 CFR 46.104(d)(702) for research involving

Category 2 (2018): EDUCATIONAL TESTS, SURVEYS, INTERVIEWS, OR OBSERVATIONS OF PUBLIC BEHAVIOR. Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met: (i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects; (ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or (iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7).

You may begin conducting your research as outlined in your protocol. Your study does not require further review from the IRB, unless changes need to be made to your approved protocol.

<u>**As the Principal Investigator (PI), you are still responsible for contacting the UNC IRB office if and when:**</u>

UNIVERSITY OF
NORTHERN COLORADO
Institutional Review Board

- You wish to deviate from the described protocol and would like to formally submit a modification request. Prior IRB approval must be obtained before any changes can be implemented (except to eliminate an immediate hazard to research participants).
- You make changes to the research personnel working on this study (add or drop research staff on this protocol).
- At the end of the study or before you leave The University of Northern Colorado and are no longer a student or employee, to request your protocol be closed. *You cannot continue to reference UNC on any documents (including the informed consent form) or conduct the study under the auspices of UNC if you are no longer a student/employee of this university.
- You have received or have been made aware of any complaints, problems, or adverse events that are related or possibly related to participation in the research.

If you have any questions, please contact the Research Compliance Manager, Nicole Morse, at 970-351-1910 or via e-mail at nicole.morse@unco.edu. Additional information concerning the requirements for the protection of human subjects may be found at the Office of Human Research Protection website - http://hhs.gov/ohrp/ and https://www.unco.edu/research/research-integrity-and-compliance/institutional-review-board/.

Sincerely,

Nicole Mor

Nicole Morse
Research Compliance Manager

University of Northern Colorado: FWA00000784

APPENDIX B

RECRUITMENT EMAIL

To the Rocky Mountain ADA Center:

My name is Tyler Anderson and I am a doctoral candidate in the Counseling Psychology program at the University of Northern Colorado. I am currently in the process of completing my dissertation which focuses on the relationship between stigma, quality of life, and psychological distress. The ultimate goal of this research is to further an understanding of the way disability acts as a salient identity factor and reduce the negative impact of disability-related stigma which creates innumerable barriers. Many of these barriers create direct challenges for full implementation of the Americans With Disabilities Act. Consequently, I believe that this research will aide in your organizations mission to systemically reduce barriers to full implementation of the ADA.

I am writing to request your assistance with distribution of this survey to your mailing list to allow your members and constituents an opportunity to participate, pending IRB approval from UNC. A key component of this research is ensuring that individuals with all disabilities are able to participate so that the information gathered does not inadvertently silence one segment of the population. I believe that your organization may be able to help ensure that people with different disabilities and life experiences are able to use their voice, advocate, and assist the field of psychology in providing evidence based care to reduce the impacts and barriers of disability-related stigma.

I look forward to the opportunity to discuss this research with you further,

Tyler Anderson, BA

Doctoral Candidate, Counseling Psychology

University of Northern Colorado

Tyler.anderson@unco.edu

970-351-2289

APPENDIX C

INFORMED CONSENT DOCUMENT

CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH
UNIVERSITY OF NORTHERN COLORADO

Project Title: DISABILITY IDENTITY: AN INVESTIGATION OF THE RELATIONSHIP BETWEEN STIGMA, QUALITY OF LIFE, AND PSYCHOLOGICAL DISTRESS
Researcher: Tyler Anderson, Doctoral Student, Counseling Psychology
Phone Number: (970)-351-2731 E-mail: tyler.anderson@unco.edu
Research Advisor: Jeffrey Rings, Ph.D., Applied Psychology and Counselor Education
Phone Number: (970)-351-1639 E-mail: jeffrey.rings@unco.edu

In the present study I am examining the impact of disability identity and the relationship between stigma, quality of life, and psychological distress. As a participant in this study you will be asked complete a short survey administered using Qualtrics software. The survey will ask questions that will ask you to answer questions related to your disability, quality of life, psychological distress, and experiences of stigma. There are no right or wrong answers. I am only interested in your honest responses. The entire survey will take approximately 25-30 minutes of your time.

For the survey, you will not be required to submit your name or any other identifying information. However, you will be asked to provide responses to basic demographic information such as age, gender, sexual orientation, etc. All responses will be recorded through Qualtrics and will be protected by a password at all times. Due to the nature of electronic data collection, it is not possible to guarantee confidentiality. However, every effort is made so that participants in this study will remain anonymous, as all data will only be reported in group or aggregate format.

There are minimal risks associated with participation in this study. You may have feelings of discomfort when answering questions related to quality of life or identity. If uncomfortable feelings do occur, mental health support in your area may be found at the following link https://therapists.psychologytoday.com/rms/ or by calling 1-877-726-4727. By participating in this study, you have the option to enter a supplemental drawing to qualify for one of four $25 Amazon gift cards. Further, your responses will help psychologists and other mental health clinicians when providing treatment and care of their clients with disabilities.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please complete the questionnaire if you would like to participate in this research. **By completing the questionnaire, you give your permission to be included in this study as a participant.** You may print this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Nicole Morse, IRB Administrator, Office of Research, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

Please select one of the following options:

I consent to participate in this study. I understand that I can choose to discontinue my participation at any time.

I choose not to participate in this study at this time.

APPENDIX D

PERSONAL IDENTITY SCALE

Personal Identity Scale (PIS)

Hahn, H. D., & Belt, T. L. (2004). Disability identity and attitudes toward cure in a sample of disabled activists. *Journal of Health and Social Behavior*, *45*(4), 453-464.

In general, I’m glad to be a person with a disability

1) Strongly Disagree
2) Disagree
3) Neither Agree or Disagree
4) Agree
5) Strongly Agree

Being a person with a disability is an important reflection of me

1) Strongly Disagree
2) Disagree
3) Neither Agree or Disagree
4) Agree
5) Strongly Agree

I have a clear sense of what my disability means to me

1) Strongly Disagree
2) Disagree
3) Neither Agree or Disagree
4) Agree
5) Strongly Agree

I feel proud to be a person with a disability

1) Strongly Disagree
2) Disagree
3) Neither Agree or Disagree
4) Agree
5) Strongly Agree

My disability sometimes makes me feel ashamed

1) Strongly Disagree
2) Disagree
3) Neither Agree or Disagree
4) Agree
5) Strongly Agree

I do not feel good about being a person with a disability

1) Strongly Disagree
2) Disagree
3) Neither Agree or Disagree
4) Agree
5) Strongly Agree

I regret that I am a person with a disability

1) Strongly Disagree
2) Disagree
3) Neither Agree or Disagree
4) Agree
5) Strongly Agree

I do not have a sense of belonging to the disability community

1) Strongly Disagree
2) Disagree
3) Neither Agree or Disagree
4) Agree
5) Strongly Agree

APPENDIX E

QUALITY OF LIFE SCALE (QOLS)

Quality of Life Scale

Burckhardt, C. S., Anderson, K. L., Archenholtz, B., & Hägg, O. (2003). The Flanagan quality of life scale: Evidence of construct validity. *Health and quality of life outcomes*, *1*(1), 1-7.

Please read each item and circle the number that best describes how satisfied you are at this time. Please answer each item even if you do not currently participate in an activity or have a relationship. You can be satisfied or dissatisfied with not doing the activity or having the relationship.

7 = Delighted

6 = Pleased

5 = Mostly Satisfied

4 = Mixed

3= Mostly Dissatisfied

2 = Unhappy

1 = Terrible

1. Material comforts home, food, conveniences, financial security
2. Health - being physically fit and vigorous
3. Relationships with parents, siblings & other relatives- communicating, visiting, helping
4. Having and rearing children
5. Close relationships with spouse or significant other
6. Close friends
7. Helping and encouraging others, volunteering, giving advice
8. Participating in organizations and public affairs

9. Learning- attending school, improving understanding, getting additional knowledge

10. Understanding yourself - knowing your assets and limitations - knowing what life is about

11. Work - job or in home

12. Expressing yourself creatively

13. Socializing - meeting other people, doing things, parties, etc.

14. Reading, listening to music, or observing entertainment

15. Participating in active recreation

16. Independence, doing for yourself

APPENDIX F

STIGMA SCALE FOR CHRONIC ILLNESS

Stigma Scale for Chronic Illness (SSCI)

Molina, Y., Choi, S. W., Cella, D., & Rao, D. (2013). The stigma scale for chronic illnesses 8-item version (SSCI-8): development, validation and use across neurological conditions. *International Journal of Behavioral Medicine, 20*(3), 450-460.

1. Because of my disability, some people seemed uncomfortable with me.

1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, and 5 = *Always*

2. Because of my disability, some people avoided me.

1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, and 5 = *Always*

3. Because of my disability, I felt left out of things

1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, and 5 = *Always*

4. Because of my disability, people were unkind to me

1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, and 5 = *Always*

5. Because of my disability, people avoided looking at me

1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, and 5 = *Always*

6. I felt embarrassed about my disability

1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, and 5 = *Always*

7. I felt embarrassed because of my physical limitations

1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, and 5 = *Always*

8. Some people acted as though it was my fault I have this disability

1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, and 5 = *Always*

APPENDIX G

KESSLER PSYCHOLOGICAL DISTRESS SCALE (K10)

Kessler Psychological Distress Scale (K10)

Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L., ... & Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine, 32*(6), 959-976.

Instructions: These questions concern how you have been feeling over the past 30 days. Tick a box below each question that best represents how you have been.

1. During the last 30 days, about how often did you feel tired out for no good reason?

   1) None of the time
   2) A little of the time
   3) Some of the time
   4) Most of the time
   5) All of the time

2. During the last 30 days, about how often did you feel nervous?

   1) None of the time
   2) A little of the time
   3) Some of the time
   4) Most of the time
   5) All of the time

3. During the last 30 days, about how often did you feel so nervous that nothing could calm you down?

   1) None of the time
   2) A little of the time
   3) Some of the time
   4) Most of the time

5) All of the time

4. During the last 30 days, about how often did you feel hopeless?

1) None of the time
2) A little of the time
3) Some of the time
4) Most of the time
5) All of the time

5. During the last 30 days, about how often did you feel restless or fidgety?

1) None of the time
2) A little of the time
3) Some of the time
4) Most of the time
5) All of the time

6. During the last 30 days, about how often did you feel so restless you could not sit still?

1) None of the time
2) A little of the time
3) Some of the time
4) Most of the time
5) All of the time

7. During the last 30 days, about how often did you feel depressed?

1) None of the time
2) A little of the time
3) Some of the time

4) Most of the time
5) All of the time

8. During the last 30 days, about how often did you feel that everything was an effort?

1) None of the time
2) A little of the time
3) Some of the time
4) Most of the time
5) All of the time

9. During the last 30 days, about how often did you feel so sad that nothing could cheer you up?

1) None of the time
2) A little of the time
3) Some of the time
4) Most of the time
5) All of the time

10. During the last 30 days, about how often did you feel worthless?

1) None of the time
2) A little of the time
3) Some of the time
4) Most of the time
5) All of the time

APPENDIX H

DEMOGRAPHICS QUESTIONNAIRE

Demographics Questionnaire

Age: _____

Gender Identity:
a) Female
b) Male
c) Transgender
d) Genderqueer/Genderfluid
e) Other: _____

Ethnicity:

a) African American, Black
b) Asian American, Pacific Islander, Asian
c) Caucasian, European American, European
d) Latino/a/x American, Hispanic, Chicano/a/x
e) Native American
f) Biracial/multiracial
g) Other: _____

Sexual Orientation:

a) Straight (Heterosexual)
b) Lesbian
c) Gay
d) Bisexual
e) Asexual
f) Not Sure/Questioning
g) My sexual orientation is not represented on this list
h) Prefer Not to Answer

Level of Education:

a) No high school
b) Some high school
c) GED
d) High school diploma
e) Some college
f) Associate's Degree
g) Bachelor's Degree
h) Graduate or Professional Degree

Current Employment Status:

a) Employed Full Time
b) Employed Part Time
c) Self employed
d) Out of work and currently looking for work
e) Out of work but not currently looking for work
f) A homemaker
g) A student
h) Military
i) Retired
j) Unable to work

Please list your disability(ies): ______________________

Please list the age you received your disability diagnosis: __________

Please select whether your primary disability is congenital, meaning you were born with it, or acquired, developed your disability later in life: ____________

Please select one of the following disability types which best describes your primary disability:

1) **Hearing difficulty:** deaf or having serious difficulty hearing (DEAR).
2) **Vision difficulty:** blind or having serious difficulty seeing, even when wearing glasses (DEYE).
3) **Cognitive difficulty:** Because of a physical, mental, or emotional problem, having difficulty remembering, concentrating, or making decisions (DREM).
4) **Ambulatory difficulty:** Having serious difficulty walking or climbing stairs (DPHY).
5) **Self-care difficulty:** Having difficulty bathing or dressing (DDRS).
6) **Independent living difficulty:** Because of a physical, mental, or emotional problem, having difficulty doing errands alone such as visiting a doctor's office or shopping (DOUT).
7) **Other: _________________**

Please select the option that sounds most like you.

1) My disability is always not obvious to others
2) My disability is mostly not obvious to others
3) My disability is sometimes obvious and sometimes not obvious to others
4) My disability is mostly obvious to others
5) My disability is always obvious to others

Please select the option that sounds most like you.

1) My disability impacts almost no areas of your life
2) My disability impacts a few areas of my life
3) My disability impacts some areas of my life
4) My disability impacts a lot of areas of my life
5) My disability impacts almost all areas of my life

APPENDIX I

DEBRIEFING STATEMENT

Thank you for your participation in this study. Your responses will be used to help psychologists and other mental health clinicians when providing treatment and care of their clients with disabilities.

If you experienced any discomfort during this survey mental health support in your area may be found at the following link https://therapists.psychologytoday.com/rms/ or by calling 1-877-726-4727.